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NAVAL POSTGRADUATE SCHOOL
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THESIS

AN ORGANIZATION DEVELOPMENT APPROACH
TO THE COMMERCIAL ACTIVITIES PROGRAM

by

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and

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December 1983

Thesis Advisor: R. T. Harris

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An Organization Development Approach to the Commercial Activities Program

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I. INTRODUCTION

The federal government has two responsibilities: to implement and administer policies defined by the executive, legislative, and judicial branches of government, and to keep its own house in order. At times these two responsibilities conflict. The potential for conflict arises from an implied role as the ideal employer. If the federal government administers a policy designed to eliminate discrimination, for example, then the federal government must itself incorporate all facets of this policy in its own internal administration. Thus the government performs a dual role: that of implementer of policy and as an example of properly executed policy. This position is a precarious one, because the policies mandated by the executive, legislative and judicial branches often conflict.

This conflict has become more evident due to a renewed emphasis on cost effectiveness and a desire to reduce the size of the government. Proposition 13, the California "taxpayer's rebellion," was the most talked about result of the desire to reduce government, as taxpayers in California reacted to higher prices for what were perceived as inadequate services.

In reaction to this movement to reduce its size, the federal government, through the Office of Management and

Budget (OMB), has responded by implementing policies to do just that. Since the thrust of the movement is on the size of the government, the new policies address specifically that area: the size of the federal workforce.

This concept of a reduced federal workforce is not new. In 1955 President Eisenhower, through the Bureau of the Budget, stated that it was not the business of government to be in business, and that services should be sought from the private sector first. Government provision of services should be provided only when the private sector was incapable, due to the nature of the service, of providing the service. However, this early statement was not reinforced with specific direction. The Bureau of the Budget issued additional bulletins in 1957, and 1960. In 1966, the Office of Management and Budget (OMB), successor to Bureau of the Budget, issued Circular No. A-76 to the Heads of Executive Departments and Establishments. The policy was given new "teeth" as the Commercial and Industrial Type Activities Program (CITA). While the CITA program was more successful than the previous policy statement, it was not until the current administration that the goals of the policy became widely implemented.

Circular A-76 and its supplement were again revised in 1979 and in 1983, establishing administrative direction for the Commercial Activities Program (CAP) and outlined the fundamental principle for contracting of government services:

> it has been and continues to be the general policy of the government to rely on commercial sources to supply the products and services the government needs.

According to David A. Stockman, Director of OMB, in a letter accompanying Circular A-76,

> In the process of governing the government should not compete with its citizens but should rely on private industry to provide commercial products and services. [Ref. 1]

Under the current administration, the program is referred to as the Commercial Activities Program. The purpose of CAP is to reduce the size of the federal workforce by turning selected services over to private industry. In effect, CAP opens up to the private sector, services that have for some time been performed by government employees.

The implementation of CAP appears to have focused entirely on one element: to reduce the size of the workforce, with no accommodation for other subsystems of the government. The policy imposes new and untried constraints on an activity, yet the activity is still responsible for cost effective mission accomplishment. Policy mandates, such as removing "ceiling points,"[1] have been imposed with the assumption that subject organizations will absorb the reduction and its repercussions. Little guidance has been provided to implement the policy, causing unnecessary turmoil, inefficiencies, and antagonism. The end result, reduction of the

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[1]Ceiling points are how a hiring limitation is translated into numbers for a particular facility.

labor force, will eventually be reached, but a legitimate question arises about whether the subject organization will recover from the imposed changes within a reasonable length of time.

"A-76" is the vehicle the government is using to divest itself of the functions that can be performed by the private sector. The criteria for "in-house" versus "contracted" performance is the Cost Comparison Form. The subject activity estimates current costs of in-house performance. This estimate is then compared to the contractor's firm bids for the same work. The definition of the work is described in detail in the Performance of Work Statement. This document defines the work in terms of the outputs. It does not, for example, indicate what kind of organizational structure is required for the work, nor the qualifications of employees. The comparison is based, then, on outputs and costs. The CAP permits contractor use of government facilities (with adjustments in the Cost Comparison Form), and contractor use of government equipment, but clearly stipulates that an employer/employee relationship between the government and the contractor is prohibited.

What is proposed, then, in the case of contractor performance, is that contractor personnel take the place of government personnel, occupy the same or similar spaces, and provide services to the activity, yet remain separate from the activity organization. Supervision of contractor performance is assigned to a contracting officer as the activity's

representative to the contractor. Direct contact between government and contractor personnel (other than the contracting officer) concerning satisfactory or unsatisfactory work is discouraged. If a contractor's performance is unsatisfactory, the affected government personnel convey their complaints to the contracting officer rather than the contractor personnel.

The consequence of this indirect communication is a major change in how the remaining government employees perform their work. The contracting officer and the contract administration division of the activity, for example, assume a new importance in the activity's functioning, while the role of the government manager in the area of the contracted function is diminished.

There is a cacaphony of voices both for and against the program. Those espousing the program point to increased competition, a reduced federal labor force, reduced costs, increased efficiency and a stand on competition as "the American way." Those opposing the program claim that it causes increased costs, reduced control, increase in government rework, reduced efficiency, disproportionate negative impact on handicapped and minority employees, decline in worker morale, disregard of health and environmental safeguards, increased "hidden" federal labor force, and a reduction in pay scales.

How can there be such divergent viewpoints on the same program? In this paper, we contend that, despite the merits

and flaws of the Commercial Activities Program, the manner in which it was imposed upon the affected agencies caused much of the negative reaction. Instead of tapping positive forces for change, the program has created powerful resistance, turmoil, and uncertainty for the affected parties. We propose that a more effective, long lasting, and productive approach would have used the principles of organization development to guide the implementation of the program.

This thesis looks at how CAP is currently implemented at a depot and compares the approach with one that incorporates the principles of organization development. The current implementation of CAP is examined in terms of organization effectiveness, efficiency, morale, communications, continuity, and the perceptions of CAP. The method used to examine CAP implementation includes a survey of affected employees compared to the same survey of unaffected employees. This part of the examination looks at communications, continuity, and the perceptions of CAP. The second part of the method is interviews of several activity managers who have had specific experience with CAP and with employees affected by CAP. Their responses are examined in light of organization effectiveness, efficiency, and morale.

A basic tool of the organization development (OD) approach to change is the "open systems model." This open systems model allows the subject organization to examine itself as a dynamic system in which changes are incorporated by planned adaptation rather than haphazard imposition. The

organization development approach recognizes that change in one area of an organization changes the other subsystems of the organization, much like a pebble tossed into a pond. The thesis presents an open systems model as a way for federal managers to incorporate a policy such as CAP effectively.

The thesis is organized into six chapters. The Commercial Activities Program is explained in Chapter II by talking about what CAP is, why CAP is being implemented, how it is implemented, who the players are, and where it is implemented. Chapter III discusses the approach to change that organization development proposes, using an open systems model as a framework to implement change. It concludes with a comparison of CAP implementation of change to OD implementation of change. Chapter IV presents the methodology used in collecting and analyzing data on CAP at a naval facility specialized for major overhaul and repair of ships. The Findings of the data collection and analysis is the subject of Chapter V, followed by the Discussion of Findings in Chapter VI. Chapter VII concludes the thesis with Recommendations for current and future implementation of the Commercial Activities Program.

II. COMMERCIAL ACTIVITIES PROGRAM

The Commercial Activities Program (CAP) is the cornerstone of the federal government's policy to identify, define, and determine the best source for, "commercial activities the government currently performs." "Commercial activities" are functions that do not directly relate to an organization's mission. This chapter examines CAP by looking at WHAT CAP is, WHY it exists, WHERE it is implemented, HOW it is implemented, WHO the key players are, and WHEN it is scheduled. This paper focuses primarily on the implementation of CAP at a depot level Naval facility that is, a large scale non-operating Naval facility specializing in major overhaul and repair of ships.

A. WHAT IS CAP?

The Commercial Activities Program is the most recent development in the federal government's efforts to divest itself of functions that can be more efficiently performed by the private sector. The program is designed to identify which functions are performed more cost effectively by the government, and thus retained "in-house," and which are performed more efficiently by a private contractor. A commercial activity is a function in an Executive agency that does not directly support the agency's mission. Most of functions that directly support the mission of the agency,

are called "depot level" and cannot be considered for contracting out. A commercial activity, then, is a function that is "non-depot" level, and as such is targeted for possible contracting out.

It would be desirable at this point to list the specific work units or job titles that are non-depot level functions, but there are few that are universally considered commercial activities. The only function that most agencies agree is non-mission related work is janitorial or custodial work. Some agencies contracted this work out under the predecessor to CAP, the CITA program more than a decade ago.

The Office of Management and Budget (OMB), part of the Executive branch of the federal government, issues guidelines for CAP and is responsible for overseeing its implementation. The nucleus of CAP is composed of "A-76," "PWS," and the "Cost Comparison Handbook." A-76 refers to the OMB Circular which provides guidelines for CAP and lists broad categories of "contractable" functions such as:

1. Food services
2. Automatic data processing
3. Transportation
4. Security

A-76 was most recently revised on August 4, 1983. Its companion in PWS, "A Guide for Writing and Administering Performance Statements of Work for Service Contracts," issued by the Office of Federal Procurement Policy (OFPP), the

policy-definition arm of OMB. The Cost Comparison Handbook describes the costing procedure used to compare government performance of a function to contractor performance of a function.

A-76 includes broad categories of functions that are inherently governmental and as such cannot be contracted out. These include:

1. services provided by the Internal Revenue Service such as collection of taxes,
2. services performed by other components of the Department of the Treasury such as control of treasury accounts and money supply,
3. administration of public trusts performed by the Social Security Administration, and
4. intelligence and counter-intelligence operations such as those provided by the Central Intelligence Agency.

Other functions exempt from the CAP are those relating to our national defense, combat support, foreign relations, management of federal employees, regulation of the use of space, oceans, our navigable rivers and other natural resources, and the regulation of industry and commerce including food and drugs.

What the A-76 does not do, is specify any of the commercial activities to any particular Executive agency. The Circular is open to interpretation by each of the Executive agencies required to implement it. The letter

from the Director of Management and Budget accompanying the Circular specifically states that the program should be implemented with a "minimum of internal instruction" [Ref. 2].

As implemented by the Department of the Navy, there are four components to a CA study:

1. An inventory of non-depot level functions is prepared and submitted to Chief of Naval Operations via the depot's major claimant. The major claimant reviews the list and selects those functions that will be studied during the ensuing fiscal year for possible contracting out.
2. The depot prepares a Plan of Action and Milestone (Gannt) chart for approved functions to facilitate timely completion of documents required by Circular A-76 such as performance of work statements (PWS), cost comparison study, and most efficient organization (MEO).
3. Managers who have direct responsibility for the commercial activity under study usually prepare performance of work statements and define the most efficient operation.
4. An annual report is prepared for OMB via the major claimant listing the CAP studies completed and the results of each study, i.e., who performs the commercial activity in the most efficient and cost effective way: the depot or a contractor.

B. WHY HAVE A CAP?

This section reviews the positive as well as the negative reasons for the CA program. First the negative reasons are examined.

The initial impact on the affirmative action program has not been significant, possibly due to the limited number of functions contracted out to date. Long term effects could be negative. Training programs such as worker-trainee, helper to journeyman, etc., which have enabled minorities to break down racial and cultural barriers and women to break down sex barriers may suffer as entry level positions are eliminated when functions are contracted out. The employment of handicapped employees may also be reduced by the CAP.

Controversy surrounds the protections afforded government workers who lose their jobs because of contracting out. In testimony before the Committee of Post Office and Civil Services Subcommittee on Human Resources, the National Employment Director of Disabled American Veterans spoke of a disabled veteran with preference eligibility who was offered "right of first refusal" with the contractor when his job was lost. He was offered employment of only twenty hours per week at a pay rate of $5.59 per hour with fringe benefits amounting to only 32 cents per hour (amounting to approximately 6% of total pay), rather than the

27.3%[2] included in the cost comparison study for government workers [Ref. 3]. There is no requirement for a contractor to provide preference to disabled veterans as mandated in the federal sector. The social costs created by the elimination of such programs are difficult to estimate.

A decline in morale is predicted for workers whose jobs are studied for contracting out. The study itself creates uncertainty for employees some of whom react by trasnferring to other positions within the organization, or quit altogether. This turmoil is difficult to contain and creates problems for the manager who is trying to carry on normal operations, orient new employees, as well as conduct the PWS.

Once a function is contracted out, the manager loses direct control over that function. Complaints about contractor performance cannot always be resolved on the spot. Complaints are routed through the contracting officer or his/her Technical Representative (COTR), and then to the contractor. The "learning curve" concept applies to contractor performance. Regardless of one's expertise in a given field, an orientation period is necessary to learn the jargon, layout of the facility, format for the work, etc. This learning curve and concurrent adaptation affects

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[2]Supplement to Circular A-76 (Revised), 4 August 1983, p. IV-10. This figure includes 20.4% for retirement benefits, 3.7% for life and health insurance benefits, 1.3% for Medicare, 1.9% for worker's compensation, bonuses and awards, and the unemployment program

contractor employees as well as government employees, who must learn to work around contractor personnel. While contractor costs are set by the bid procedure, the costs of time lost by government personnel are not counted. One cost, however, that can be traced is the amount of rework necessary to correct contractor errors. Either the contractor absorbs the cost, if the rework is performed by the contractor, or the contractor bills the government if a change order is involved, or the government performs the rework in interests of time or money.

A U.S. News and World Report article entitled, "U.S. Government's Invisible Workers," indicated that government agencies are turning to contract labor to circumvent manpower ceiling reductions [Ref. 4]. Opponents of the CAP point out that while the direct payroll is decreased, the government is simply disguising the size of its workforce. The disguised workforce coupled with accusations of reduced pay scales for contractor employees are the reasons cited by labor unions for the emphasis on contracting out.

Concern is voiced about contractor enforcement of safety and health regulations. A depot safety officer cannot enforce OSHA standards unless there is a situation of "imminent danger." Imminent danger is defined as danger of loss of life, significant damage to government equipment or property, or safety and health hazard to government employees. Security is cited as another concern when contractor personnel require access to secure areas to perform

their jobs. A depot experienced backlogs of uncompleted work when a contractor hired foreigners to perform government work. The contractor was reminded that non-citizens could not perform the work, and the backlog was created as the contractor found and trained new people.

When government employees vacate a function, they are transferred, retire, or quit. The history of the function is lost, as the contractor cannot tap these resources unless these knowledgeable employees choose to work for the contractor.

There are other hidden costs to the CAP. Performing commercial activity studies consumes time and personnel resources. The costs of conducting these studies are not reflected in the cost comparison. Studying two functions at a small Navy installation (approximately 1,000 employees) cost in excess of $104,000. A moratorium was placed on the two functions, precluding the installation from completing the CA process. In effect the $104,000 was lost [Ref. 5]. The moratorium creates long-term uncertainty for the affected employees, who either "learn to live with it," or leave.

All CA studies of 11 or more employees conducted in the Department of the Navy must be audited by the Naval Audit Service [Ref. 6]. During fiscal year 1982, a total of 220 CA studies were audited at a cost of $980,564. Travel and perdiem costs for these studies amounted to $49,028 bringing the total costs to about $1,029,000 [Ref. 7].

One Naval facility contracted out its commercial activities studies. When the initial study was found inadequate, the facility modified the contract to reflect a more accurate statement of work. Total cost for the CA study: $100,000 [Ref. 8].

A learning curve is associated with conducting CA studies. Navy employees assigned to this task must be trained. Basic training lasts one week and is conducted in various regions throughout the United States. In order to calculate the costs of this training, one must include travel, perdiem, and the opportunity cost of lost productive time as well as the costs of the training itself. Some CA studies have been conducted by Navy employees who have not been adequately trained, due to time or personnel constraints. The consequences of inadequate studies are several: rework time if the study has to be redone, change orders to a contract if the initial contract is deficient, lost productivity for the facility as it compensates for the unprovided services. A critical consequence of an inadequate study is the failure to develop "the most efficient organization" prior to costing the function. This can result in a contractor winning a bid for work that actually can be performed more efficiently in-house.

Severance pay for laid-off workers, loss of technical expertise of those who change positions, relocation costs for those who take jobs at other Navy facilities, loss of expertise of those who retire early, and training of

relocated or transferred employees are all costs associated with the Commercial Activities Program. An assessment of the specific dollar costs associated with these externalities is beyond the scope of this paper.

Opponents to CAP cite "buy-ins" as a potential problem, a practice where a contractor underbids a contract in order to get hired. Once hired, the contractor provides the minimum level of service required by the contract. The contractor relies on change orders and contract renewal options for profit. If a contractor is unquestionably incapable of performing, the facility may cancel the contract and put the function out for bid again, causing loss of services until a new contractor is hired. The government cannot compete in this second round of bidding. An opportunistic contractor can take advantage of this void.

The threat of strikes poses a more serious consequence of contractor performance. Services provided to the Navy could be interrupted by a strike by contractor employees. A recent strike on the West Coast halted the repair of the main ship of a battle group until government employees could be brought in. Fortunately government expertise was available in the same geographical area so that the repair was completed. The impact of a strike of this magnitude, had government expertise not been available, would have had repercussions throughout the fleet.

Probably the greatest potential benefit to be derived from the commercial activities program is the increased

efficiency gained from the implementation of the MEO concept. As the facility applies industrial engineering principles such as standards and measurements of performance, control and evaluation to each function defined in the PWS, the organization of a function is restructured in order to attain optimal performance. As the Navy fully implements the MEO, the following potential benefits can be realized.

1. Operating costs decrease and productivity increases as unnecessary and inefficient work practices are identified and eliminated.
2. Navy managers define objective standards for evaluating the contractor's performance or its own performance if the work remains in-house.
3. Contract administration costs decrease since objective performance criteria combined with a reliable inspection system based on random sampling requires fewer inspectors to ensure quality.
4. Work force requirements and staffing decisions for functions remaining in-house are supported by credible and reliable data to justify personnel requests.
5. The turmoil and disruption associated with contracting out Navy functions lessen as Navy employees realize the personal satisfaction of "winning" a study that remains in-house.

While there are no specific cost saving data available for the Navy, the Department of Defense (DoD) reports the

following savings through its use of efficiency reviews[3] over a three-year period.

1. a reduction of 600 positions created a savings of $30 million over a three-year period.
2. more economical contract performance resulted in savings of $130 million.
3. annual operating costs of commercial activities were reduced by 5 percent. [Ref. 9]

The increased emphasis on organizational efficiency and the injection of the incentives provided by competition may offer further advantages. Requiring all government managers to evaluate their use of personnel in a competitive environment viewpoint will lessen the tendency toward "empire building." Empire building includes three non-productive practices:

1. grade creep, the practice of rewarding good performers with position upgrades (instead of within-grade increases or cash awards),
2. overstaffing during low activity cycles in order to ensure sufficient manpower during high activity cycles,
3. increasing the number of employees supervised in order to enhance the supervisor's position.

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[3]Efficiency reviews are similar to the CA process but are conducted for non-CA functions. The Efficiency Review includes the PWS and MEO but does not include the cost comparison.

The application of the MEO concept through a CA study highlights the typical flaws of government employment: low productivity, little incentive to cut costs, restricted and ineffective use of human resources. While the CA program may seem draconian, some of these ills may be alleviated in the process.

With the MEO process, managers are recognized for controlling costs and producing outputs according to a predefined standard rather than for maintaining the status quo.

C. WHERE IS CAP IMPLEMENTED?

All agencies in the Executive branch of the federal government are covered by Circular A-76. Only the Judicial and Legislative branches and the Executive Office of the President are exempt from these provisions. The provisions contained in Circular A-76 are identical for all agencies, but the Department of Defense (DoD) has been a consistent leader in carrying out the OMB policy [Ref. 10]. DoD has completed more efficiency reviews and cost comparison studies than any other federal agency. About 40% of the cost comparisons studied show that it is more economical to retain the function in house [Ref. 11]. Within DoD, the following functions have been contracted out: laundry and dry cleaning, grounds maintenance, keypunch services, operation and maintenance of radio transmitting, bulk liquid storage operations, janitorial services, missile maintenance,

precision measurement equipment laboratory, food services, and audiovisual service [Ref. 13].

The proportions of contractors and government employees is currently approximately 40% contractor employees and 60% federal government employees [Ref. 14].

D. WHO ARE THE CAP PLAYERS?

This section examines the key players in the CA process, from the time a depot submits its package to its major claimant until the most efficient organization has been identified.

1. Depot

The depot is certainly one of the most critical players since it has ownership of the commercial activity.

2. Naval Regional Contracting Office (NRCO)

This office serves as the liaison between the depot, the contractors and other players. It serves as a depositary for both the depot and contractors.

3. Defense Contract Administration Service (DCAS)

This support agency specializes in administering contracts for the four military services. It performs audits on contractors starting with the lowest bidder, after the official bid opening, to determine if the contractor is ready, willing, and able to perform the service as specified in the solicitation for bid.

4. Naval Facilities Engineering Command (NAVFAC)

This command establishes the procurement procedures for commercial activity solicitations for all public works jobs in the Department of the Navy.

5. Navy Supply Command (NAVSUP)

This command establishes the procurement procedures for all commercial activities except public works jobs.

6. Contractors

A contractor is a private sector firm that bids on a commercial activity. Some private sector firms may be designated a small business if the following criteria are met. As a manufacturer of goods, the business must employ 500 or less people. In the service business, average annual sales for the most recent three-year period must not exceed the benchmark established for a particular type of service. The Defense Acquisition Regulation (DAR) lists 18 different categories of services. Figure 1 displays a sample taken from the DAR:

FUNCTION	BENCHMARK
Janitorial and Custodial	$4.5 million
Base Maintenance	7.5 million
Food Service	5.5 million
Laundry & Dry Cleaning	4.0 million

Figure 1. Categories of Service

7. Small Business Administration (SBA)

The SBA determines if a small business is competent after the NRCO review and the DCAS audit have determined that the contractor cannot successfully fulfill the requirements of the solicitation for bid. SBA uses five standard categories to determine competency of a contractor:

1. Capacity--physical facility, equipment and/or number of employees are adequate or sufficient to perform the functions described in the solicitation for bid.
2. Credit--adequate working capital is available for work stipulated in solicitation for bid.
3. Tenacity--degree to which the business has performed on past government contracts.
4. Integrity--business is run in an honest and sincere manner.
5. Perseverance--business is able to endure in the market place.

If SBA determines that a low-bidder small business is competent, the business is issued a Certificate of Competency and awarded the contract, despite DCAS or NRCO negative results.

E. HOW IS CAP IMPLEMENTED?

As a first step in implementing the CAP, the depot prepares an inventory of all its commercial activities (CA). This inventory is updated annually. The inventory includes current CA, known expansions of CA, and new requirements.

Functions are broken down into those with more than 10 full-time equivalent (FTE) employees and those with less than 10 FTEs.[4] This inventory is available to the public as well as other government agencies. The major claimant of the depot reviews the inventory and approves the functions to be studied during the ensuing fiscal year. Figure 2 represents the steps of the CAP process.

A plan of action and milestone chart is prepared to facilitate orderly and timely completion of the A-76 process. This chart lists the steps in the process, targeted completion dates for each, identifies the action officer for each step and gives a brief description of the event.

Preparing meaningful performance of work statements (PWS) has become one of the most critical functions of a depot manager with commercial activity responsibility. The PWS must include all responsibilities and requirements for facilities, equipment and material as well as a description of the output requirements for the function. To be useful, a PWS must clearly state what has to be done without prescribing how it is to be done, and provide objective standards against which performance can be measured regardless of who performs the function--a contractor or the government. The PWS is considered public information and is available to the public for review before bids are submitted. In fact,

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[4]Full-time equivalent equals 2,080 hours in a workyear, 2,087 hours beginning in fiscal year 1985.

FLOW CHART
IMPLEMENTATION OF OMB CIRCULAR NO. A-76
EXISTING GOVERNMENT ACTIVITIES AND EXPANSIONS

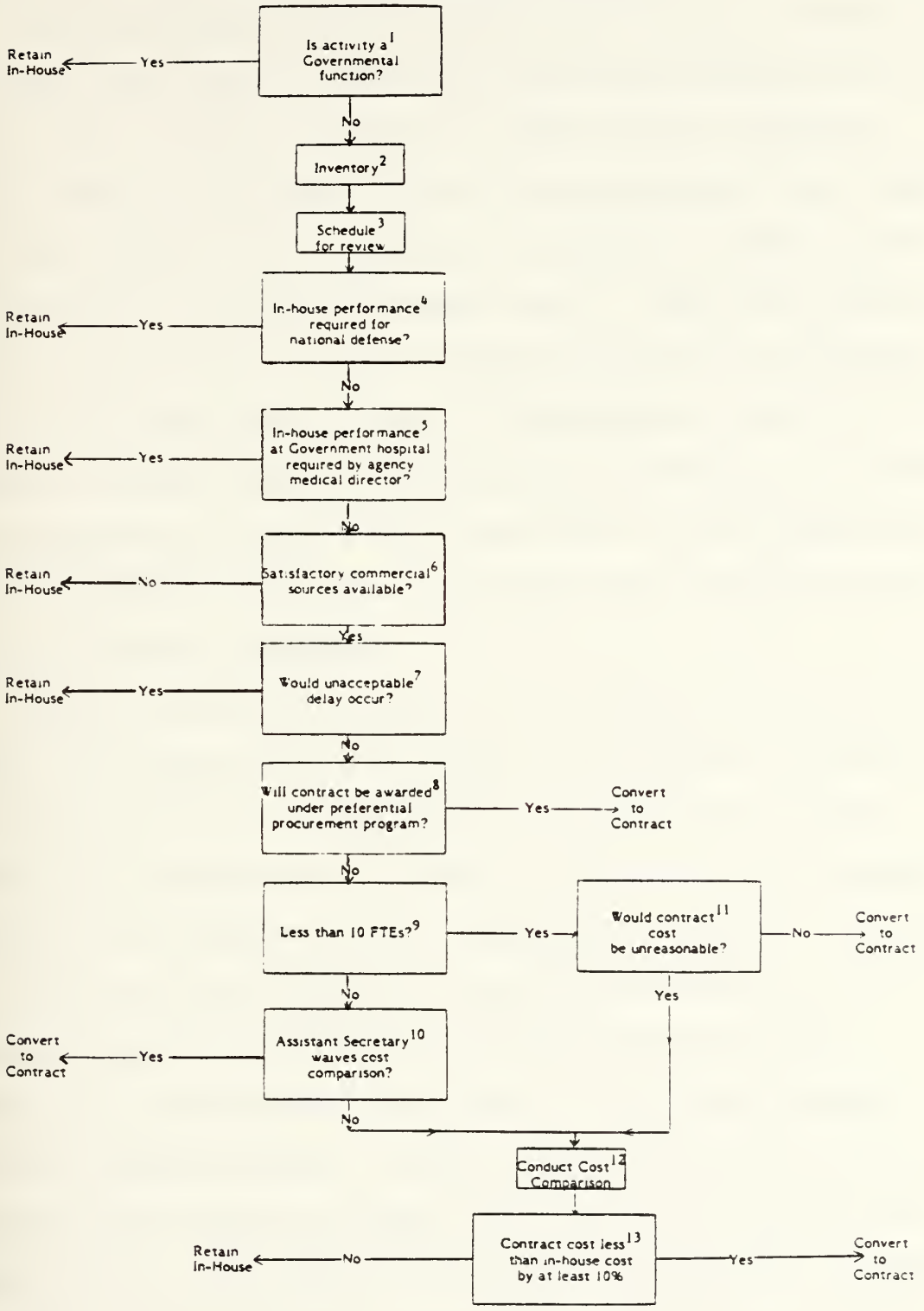

Figure 2

it is the PWS that forms the basis for the cost comparison study and the contractor's bids.

A well developed PWS is a major part of the in-house cost estimate which results in a most efficient organization (MEO). This study, if done effectively, restricts the tendency toward "empire building," since the organization must reflect the best efforts of the department manager to improve the operations of the function under study. Using the PWS as a guide, the primary emphasis is defining the best possible way of doing what must be done. The manager should be given complete freedom and encouraged to be innovative and creative in reshaping the old work unit into one that is competitive with the private sector but still meets the required quantity and quality standards.

The most efficient organization includes an analysis by FTEs, job titles and grade levels. This study is considered very sensitive and is submitted to the NRCO in a sealed package at the same time the PWS is submitted. The sealed package is not opened until a successful bidder is identified.

Since both the depot's and private contractor's cost estimates must be based on the same scope of work and standards of performance, the PWS is a critical document for the bidding process. There are two procedures used at the depot for bidding--formal advertising and competitive negotiations. The type of contract determines the bidding procedure that is used. NAVFAC requires the formal advertising procedure for all public works jobs, but NAVSUP

uses the competitive negotiated bid for other service contracts. There is a fundamental difference in the two procedures.

When public works jobs are ready for bid, the use of formal advertising requests a firm fixed-price bid from the contractors.

Using competitive negotiations, a request for proposal is solicited. Then the contracting officer at NRCO discusses the proposal with each contractor to assure a clear understanding of the solicitation. This is the negotiation phase. At this point the contractor may change the proposal. When a clear and complete understanding exists, the contractor submits a "best and final offer" which cannot be changed.

The contracting officer at NRCO begins reviewing the bids starting with the lowest bidder. One by one the bids are referred to DCAS for audit. When DCAS approves a contractor, the sealed package containing the cost for doing the business in-house is opened revealing for the first time the depot's most efficient organization. The next step is to compare the depot's cost to the contractor's cost. This is done by completing a standard Cost Comparison Form, part of A-76. This cost comparison takes the contract price and adds in contract administration, any additional costs and one-time conversion costs. If this total exceeds the in-house costs by less than 10%, the function remains in-house for another five years.

If DCAS finds a low bid contractor who is designated a small business "not competent," the bid package is referred to the Small Business Administration (SBA) for review. If SBA supports the findings of DCAS, the next lowest bidder is then audited by DCAS. If SBA finds the small business to be competent, the contractor is issued a "certificate of competency" and the cost comparison is completed.

Ten or fewer FTEs in a commercial activity is considered a threshold and may be converted to contract without conducting a cost comparison except in DoD. No commercial activity exceeding the threshold can be modified, reorganized, or in any way changed just to avoid a cost comparison study.

When the cost study begins, the civilian personnel office must conduct a mock reduction-in-force (RIF) to identify the employees affected and estimate the cost to the government of displacing the employees if the function is contracted out. Employees holding temporary appointments have limited rights, but employees holding career appointments have many rights that must be considered. Often, the career employee whose job is eliminated by contracting out the function does not lose his/her job, but an employee with a shorter length of service in another department may ultimately be displaced. Employees who are placed in lower-graded jobs have pay retention rights for a period of time at their former grade level. In other situations, employees are placed in jobs for which they are minimially qualified according to civil service regulations. This, of course, reflects a high degree of

social responsibility on the depot's part, but at the same time increases training costs and decreases productivity during the "settling-in" period. The employee who is laid off receives severance pay based on years of service. When the CA cycle is finalized, losing the in-house function triggers implementation of the reduction-in-force.

Legal disputes about conversions to contractor performance are limited to appeals based solely on the cost comparison form entries. No other appeals have been accepted.

Some employees have become very active in fighting the CAP. Employees have formed lobbying organizations either as part of their bargaining unit or independent of it. One such organization called "SCOT," for Stop Contracting Out Today, has many supporters throughout the federal government. Some participants in this organization feel that through its efforts, a five year moratorium was placed on contracting out the fire fighting function at some Navy installations.

"Buying-in" is the term used to refer to a contractor who underbidsthe contract in order to get a foot in the door and then raise prices. The General Accounting Office feels that such accusations are not correct since in-house functions and contractors bid on the same statements of work.

With regard to circumventing personnel ceilings, the General Accounting Office (GAO) disputed this accusation when it said that, it

> ...found no evidence that the desire to circumvent personnel ceilings led to contracting out decision,

but that

> It is clear, however, that the military services use DoD's CITA (Commercial and Industrial Type Activities) to reduce their civilian workforce. The cost savings by contracting out were generally attributable to differentials in personnel costs between in-house and contractor performance. The contractors generally planned to use fewer employees and to pay them less. [Ref. 15]

Trained contracting officer technical representatives (COTRs) ensure acceptable levels of performance from contractors when the in-house bid is unsuccessful.

The Service Contract Act (41 U.S.C. 351) protects the interests of the contractor employees. It requires that

> the service contractor's employees be paid at least the prevailing rates for similar employees in the locality, or the rates provided for in a collective bargaining agreement covering such employees. [Ref. 16]

Changing the scope of work after a function is contracted-out requires change orders to the original contract. This is costly and time consuming. Well written performance of work statements minimize the need for change orders to a contract.

Problems of non-performance by contractor should be minimized as the CAP process continues. Managers and management analysts are improving their skills in writing performance of work statements and cost studies. Results and audits of solicitations for bid by contracting officers at NRCO and DCAS minimize the risk of letting a bid to a contractor who cannot perform. When a contractor cannot perform, however, the contract is cancelled and the function

is again performed in-house, usually with temporary employees, until a competent contractor is found.

F. WHEN MUST CAP BE COMPLETED?

The initial reviews of all commercial activity in the federal government must be completed by September 30, 1987. By March 15 of each year, agencies must report their progress in reviewing commercial activity to the Office of Federal Procurement Policy, OMB. This three part report includes the inventory and review schedule, reviews and cost comparisons conducted during the past fiscal year, and effects of reviews or cost comparison studies on the budget year and budget year plus one budget estimates. A function that is studied and remains in-house for any reason will be studied at least once every five years.

At least once per year the Navy must publish its schedules for conducting cost comparison studies in both the Commerce Business Daily and the Federal Register. These schedules msut be published at least 30 days before beginning the first cost comparison study on the schedules and include the name and location of each study and date it is to begin. Any change to this schedule requires a 30 day public notice in both publications. When an agency finds that no commercial source is capable of providing the needed product or service, three notices describing the requirement must be placed in the Commerce Business Daily over a 90 day period.

In the case of a bona fide urgency, two notices over a 30 day period will suffice.

When a contractor is successful, the proposal acceptance period must be extended 60 days to cover the appeal period.

Any time a new requirement is added to a federal agency's mission that falls into the commercial activity category, it will be performed by contractor unless

1. there is no satisfactory commercial source available,
2. it is exempted for national defense reasons,
3. if it involves a hospital operated by the government, the hospital's chief medical director determines that in-house performance is in the best interest of direct patient care.

When a commercial activity is expanded it will be studied for contracting out. An expansion is defined as a cost increase of 30% in either the total capital investment or the annual personnel and material cost.

G. SUMMARY

The CAP has forced the functional manager to streamline the function he or she supervises. One may question whether this streamlining would take place without an impetus such as CAP. Some important points to keep in mind about the CAP are that

1. It is mandated for implementation by almost all Executive agencies.
2. It changes the roles of several offices in an organization.

3. It causes repercussions throughout the organization as employees are shifted and functions are changed.

In the next chapter an approach for managing change is presented. It is designed to assist the organization in planning for and adapting to change in the most effective way.

III. MANAGING CHANGE THROUGH ORGANIZATION DEVELOPMENT

This chapter explores managing change through the use of organization development (OD) strategies. We discuss the manager's and worker's role in a changing environment, and introduce an organization model for a changing environment. The chapter ends with a summary of the differences between an OD approach to change and organizational change through the commercial activities program (CAP).

A. THE ORGANIZATION DEVELOPMENT APPROACH

To reduce organization development to a short, simplistic definition would be misleading, so it is discussed in terms of what it is, what it can do, who is involved and how it functions. Organization development is a consciously planned process, using behavioral science techniques, which focuses on problems that prevent an organization from reaching its optimum level of performance. Optimum performance is measured in terms of three elements: an organization's efficiency or the ratio of inputs to outputs, effectiveness or how well it achieves its goals, and organization "health." Organization health can be measured three ways:

1. Integrating organizational and individual goals,
2. Maximizing organizational and individual problem-solving capabilities,
3. Encouraging organizational and individual growth.

Changes based on a planned systematic approach usually take place as the result of a successful OD effort. Because the change is planned and systematic, it is long lasting. Using the OD process, change is managed from the top and is system wide. Planned change results from a systematic diagnosis of the organization, strategic plans for implementing necessary change, and making available the necessary resources for carrying out the changes. "Managed from the top" means that top managers of the organization have a personal investment in the OD process, have both knowledge of and commitment to the goals of the process, and actively support the methods used to achieve the goals. All who will be affected by the change should participate to some degree in the process of change. "System-wide" simply means that a change may affect the total organization such as a new performance evaluation system or a department-wide change such as transferring work from within one part of an organization to an external source. These changes have a ripple effect on the rest of the organization.

Organization development enhances the in-house capabilities of an organization, so its optimum performance is a recurring process rather than a chance occurrence.

Typically, for OD to be successful, an outside consultant is obtained to gather data, diagnose the organization, and feed the data back to the client. Together with the top manager of the organization, the consultant develops an action plan, assists in implementing the action plan, and

evaluates the change. The intervention by the consultant is terminated with the concurrence of the client. The consultant leaves the client with the ability to continue to manage the change. During this process, the managers and employees must assume very important roles as participants in the change process if the change is to be successful.

There is a natural tendency for people to resist change. Understanding the nature of the resistance to change will assist the manager in the change process. Letting employees participate in making the change is one way to lower their resistance. An active role in a change process makes an important contribution to the employee's estimation of self-worth and enhances the contribution which the employee makes to the change [Ref. 17].

Keeping change a secret until it is ready for implementation is a sure way to build resistance. Changes in human relationships create unexpected resistance to changes made in employee jobs. Managers or staff personnel cause resistance by their insensitivity to the effects of change on their employees. Resistance, when it occurs, should not be considered as something that must be overcome but rather as an indication that something is wrong. Thus, when resistance occurs, it is time for the manager to listen carefully to his/her employees to identify the problem and take corrective action. The resistance that prevents successful change is a symptom of a problem and not the problem itself. By using

the OD process, the trained manager can learn to anticipate and forestall resistance, rather than being subject to the effects of resistance.

Kurt Lewin's three-step model of the change process can be used successfully by managers. It deals with behavioral and attitudinal change which must take place in sequential steps or phases.

1. Unfreezing of old attitudes, behaviors, and values.
2. Change or the learning of new attitudes, behaviors, and values.
3. Refreezing or the reinforcement of any learning. [Ref. 18]

This model provides a time dimension for ordering events and calls the manager's attention to conditions existing at the onset of the external force requiring the change.

B. THE OPEN SYSTEMS MODEL

A basic tool of the OD approach to change is the open systems model. A system is a set of interrelated elements so a change in one element may lead to changes in other elements. A system that interacts with its environment is called an "open system." Thus, an open system's model is very appropriate for use by a depot. The model chosen for use here is "A Congruence Model of Organizational Behavior" developed by David A. Nadler and Michael L. Tushman [Ref. 19]. This model provides a framework for looking at an organization as a total system. Its major thrust is that

for an organization to be effective, its components must be consistently structured and managed. The organization must approach a state of congruence. Figure 2 is a visual representation of the model.

There are a number of basic systems characteristics. Five of the most critical to the understanding of this model are mentioned here. First, organizations display degrees of internal interdependence. Therefore changes in one component or subpart of an organization can have repercussions for other parts since these elements are interconnected. Second, organizations have the capacity for feedback. Feedback is essential because it is information about the output of a system which can be used for controlling the system.

Organizations tend to move toward a state of balance which introduces equilibrium as the third characteristic of organizations as systems. Fourth, equifinality is displayed by open systems which means that different system configurations can lead to the same end or lead to the same type of input-output combination. Thus, there is no universal or one best way to organize.

Last, open systems need to adapt. As environmental conditions change, a system must also change if it is to remain viable.

The model consists of three phases which are ongoing and simultaneous. They are inputs, transformation process and outputs. Inputs consist of three basic elements with each containing several features and a critical input

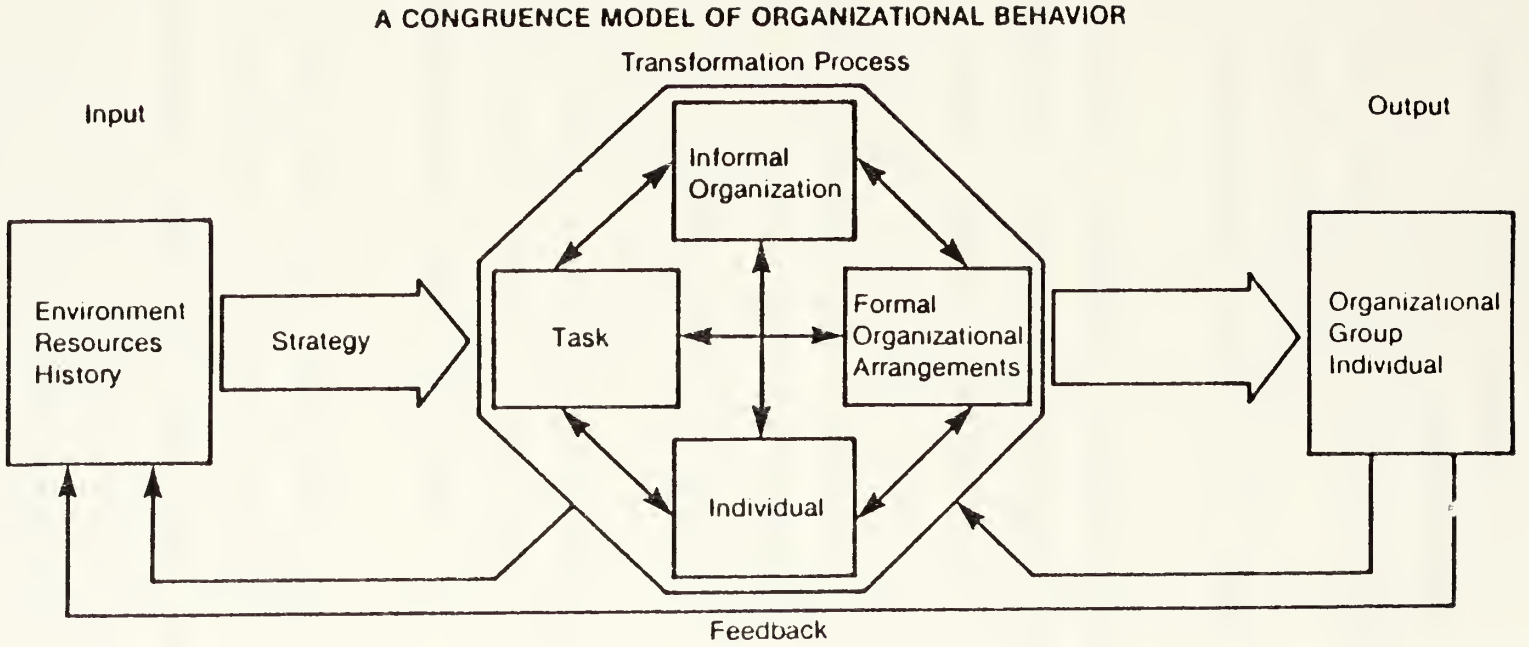

Figure 3. The Open-Systems Model of Congruence

referred to as 'strategy.' Environment, the first basic input, has three critical features.

1. It makes demands on the organization.
2. It places constraints on organizational action by limiting the types or kinds of activities in which an organization can engage.
3. It provides opportunities for the organization to explore.

The second input, resources, include the system's employees, technology, capital or appropriations, information and intangible assets, such as the perceptions about the organization among its client group, or a positive organizational climate. Two important aspects of resources are their relative value in the given environment, and the flexibility of the various inputs, or how quickly they can be reconfigured to adapt to change.

History, the third input of the organization, refers to the patterns of past behavior, activity, and effectiveness of the organization which may affect its current functioning.

Strategy, the final input, describes the entire range of decisions made which support the organization's mission and includes specific supporting strategies that the organization will use to achieve its mission and the specific performance objectives established for this purpose. In other words, a strategy determines how the organization will use its resources and history within the constraints of its

environment to reach its goals, thereby accomplishing its mission. These strategic decisions determine the necessary outputs for the organization.

Outputs tell us how effective the organization is. In an organization such as a depot, outputs can be looked at from three levels. At the organizational level, the effectiveness with which an organization meets its objectives, how efficient it is in using its resources, and how well it adapts to changes in its environment are factors for determining the extent of organizational functioning. How well groups or units function and individual behavior and affective reactions such as satisfaction, stress, and quality of work life, also influence an organization's outputs.

In the transformation process, strategies are implemented to produce effective organizational outputs through group or unit cohesiveness and individual performance. The organization is, in fact, the transformation process.

According to the model, the organization consists of four components: an informal organization, the formal organization arrangements, individuals and tasks. Each of these components must be understood in order to fully appreciate the complexities of an organization.

The informal organization can be either useful or harmful, depending on its power base. It requires management attention if its focus is in opposition to the overall mission of the organization.

The formal organizational arrangements include all the policies, procedures, structures, etc., that are explicitly formed to enable employees to perform the tasks required for the organization to accomplish its mission. This component contains four factors:

1. Grouping of jobs into units, referred to as organizational design
2. Job design
3. Work environment, and
4. Human resource management system.

Individuals or employees comprise another component of the organization. Individuals possess certain knowledge and skills, have different perceptions, needs and backgrounds. All these factors must be considered when dealing with individuals.

A task is defined as the basic work inherent to an organization. It is probably the most important component since it drives the organization and is the basic reason for its existence.

C. APPLYING THE OPEN SYSTEMS MODEL TO CAP

With this explanation of the model, at this point we will apply the model to the implementation of the Commercial Activities Program. Responding to its external environment (consisting of the Office of Management and Budget (OMB) and the Department of Defense), the depot must reevaluate its resources and possibly reconfigure them. Using its history

as a perspective, it develops new strategies which will assist in meeting deadlines imposed by external forces. One of its tasks now becomes the development of the cost comparison studies and "most efficient organizations" for the functions that are identified as non-depot functions. Thus there are now two somewhat conflicting tasks driving the depot. One is to overhaul ships on time and at cost, while the second involves reconfiguration of the depot's resources to separate non-depot related functions from depot-related ones. Overhaul of ships requires resources such as capital (appropriations), human resources, technology, equipment, materials, etc. Reconfiguration of depot services requires the breakup of complex services into discrete units. Human resources (individuals) who have the requisite skills to maintain the depot-related functions must be identified and placed in positions so that CAP will not rob the depot of needed talent. Individuals who are in positions affected by the CAP must be kept advised of their status so they can either look for work elsewhere or move to other jobs at the depot at the appropriate time.

Informal organizations, such as groups of employees who band together to try to stave off the CAP, must be recognized for what they are: a symptom of the problem, not the problem. The emergence of informal organizations of this sort are the consequence of unplanned, rather than planned, change.

Finally, any functions that are contracted out forces a change in the formal organizational arrangements.

Measurement of output remains the same but perhaps the depot can become more self-critical when examining the effectiveness with which it meets its objectives and how efficient it is in using its resources. How well it adapts to changes in its environment can be measured in terms of the morale of its individuals and their degree of productivity. Keeping apprised of these two areas will assist the organization in managing and evaluating its change process.

There are several distinct differences between the CAP approach to change and managing change through the OD approach. The first one is rather obvious--CAP change is dictated by OMB via the Department of Defense, and thus is not planned or "managed" from the top. It is complied with reluctantly in most cases, and enthusiastic acceptance is rare. The policy is dictated before the participants are "on board." The CAP change does not use behavioral science techniques. CAP may not be long lasting since it is subject to political controversy, due to the lack of agreement prior to policy-setting. The lack of top management support reflects discrepancy between the designated mission and the constraints imposed by CAP. The health of the organization is not considered prior to selecting a function for study. An organization may be required to endure needless CAP

exercises just to prove to OMB that it is already doing a job in an efficient manner. The CAP, as it is implemented according to current instruction, is a remedy without a diagnosis.

Substituting the OD approach and applying a model such as the congruence model allows the organization to analyze and improve the congruence of its components. An ultimate goal of a reduced workforce may or may not be a legitimate goal: given that it is, the way to reach the goal is by tapping the positive forces for change in the organization rather than arousing the negative forces.

IV. METHODOLOGY

This chapter discusses the methodology used in this research. Section A is an introduction explanation of the approach used, with a brief description of the research site. Section B is a discussion of how the survey and interview subjects were selected. Section C is a discussion of the survey instrument and the interview instrument. Section D concerns assumptions that were made in order to conduct the research, and Section E concludes with some particular issues impacting on this research.

A. INTRODUCTION

Data collection was accomplished by conducting surveys of depot and tenant activity employees and by conducting interviews with depot managers and tenant activity managers. Responses to the survey and interview questions fell into six categories for which relationships were examined. Three of the categories applied to the survey and three applied to the interviews. Survey relationships were examined by correlation. The significance level is used to determine the degree to which the relationship was due to chance. Relationships suggested for interview categories were not examined statistically. The interview responses were used to amplify or discredit the relevant relationships, in order to suggest areas for future research as well as to amplify findings from the statistical analysis of survey data.

The research was conducted at a major overhaul and repair facility for ships, located on the West Coast. The largest single department of the depot is the production department; the remainder of the departments provide essential and auxiliary services to the depot. The depot is physically located with several tenant activities, one of which participated in the survey and interviews. All data were collected within a thirty day period. Groups were surveyed separately and managers interviewed individually.

B. PARTICIPANT SELECTION

The survey participants were selected with the assistance of the personnel department of the depot and an administrative office of the tenant activity. Two groups of survey participants were drawn from the depot, while the third group came from the tenant activity. The original intent of the research was to compare the responses of a depot group of employees exposed to the CA study with those of a group not exposed to CAP as the control group. For two reasons it was necessary to include a third group, the moratorium group from the tenant activity. First, the low number of displaced employees available at the depot, and second, the restriction placed on the researchers not to survey employees currently under study [see Section IV.E). Due to the scheduling of the CA studies at the same time the research was conducted, several depot employees who would have qualified as having been exposed to CAP were not available. For

these reasons the group of moratorium employees from the tenant activity were included. A fairly large group (42) employed by the tenant activity had been early subjects of the CAP. The political controversy that was generated by CAP, however, caused a Congressional moratorium to be placed on any CA study of the particular function. When the research was conducted, the moratorium had been in effect for over a year. A CA study of the function had been underway for several months before the moratorium was placed. Because the moratorium only put the function on "hold," and it was entirely possible that the CAP study would eventually be completed on the function, the ultimate disposition of the function to be retained or contracted out was not known. The researchers felt that this group qualified as having experienced CAP and therefore included the group. In addition, the function of the moratorium group is to provide a particular service to the depot, so that the relationship between this function and other depot activities is very close. The data, however, for this group are reported separately from the data concerning the studied group at the depot. For the convenience of the reader, the data and analysis for a fourth group, a combination of the studied group and the moratorium group, have also been provided.

The grade levels of the studied and moratorium groups were determined and with the assitance of the personnel department a control group of depot employees was assembled.

The sole criteria for inclusion in the control group, other than grade level, was that the employee not have been studied by the CAP. No attempt was made to match sex or race. An attempt had been made to match the type of job with the moratorium and studied groups, but this was rejected because if an employee had a similar job, then in all likelihood he or she was being studied. The total numbers for each group were: 53 control, 42 moratorium, and 18 studied. The survey was administered on site by the researchers. Participation in the survey for all groups was voluntary; less than five refused to participate. Those who had agreed to participate but did not show up were identified as being on leave or shift work. Less than 10 did not appear.

The interview subjects were chosen with the assistance of the CA coordinator of the depot. The criteria for selection was that they directly or indirectly supervise employees studied under CAP, or that they dealt with CAP employees as part of their job. The twelve that were selected agreed to be interviewed, and all were available. They came from the production, public works, data processing, administrative, and personnel departments, EEO and the tenant activity.

The interview subjects ranged from first level supervision to third level supervision. This range was considered important in order to provide a "vertical slice" of the depot with regard to CAP observations. One-on-one interviews were conducted in each manager's office by the researchers.

C. INSTRUMENTS

The survey instrument is composed of 49 questions. Fifteen of the questions were considered critical to the research and the remainder were "climate setters" or served to move the respondent from one category to the next. The critical questions were clustered in three categories, stemming from the relationships suggested by the researchers.

The survey instrument was composed of closed-ended questions with multiple choice responses. The clustered critical questions were separated by non-critical questions in order to allow the respondent to deal with issues separately and to reduce the impact of one category on another. This list of survey questions is provided in Appendix A.

The interview instrument is composed of 12 open-ended questions designed to elicit the manager's observations on CAP. The questions addressed issues specifically under the purview of the manager as well as their observations of the operations of the depot. These questions were also clustered in three categories. The interview instrument is provided in Appendix B.

D. ASSUMPTIONS

Some assumptions were necessary in order to analyze the data. These assumptions are as follows:

1. That the survey administered is an appropriate indication of the effects of the Commercial Activities Program (CAP) on the work force of a depot.

2. That the manner in which the CA program has been conducted can produce negative results. The experience of CAP for a depot employee, either displaced or under a moratorium, creates a more negative attitude toward the depot than the attitude of employees who have not been studied.
3. That the sample of data collected from each group is representative of the population of that group.
4. That responses from individuals in each group are equally valid.

E. PARTICULAR ISSUES

Anonymity was guaranteed to all participants. Thus the survey specifically did not request names or identifying characteristics. The interview quotes in Chapter V are attributed either to a production supervisor or a support supervisor. The researchers conducted both the survey and interviews personally, on site. It was intended that this method would make honest responses more likely.

The depot commander placed two restrictions on the researchers. First, that employees currently under study would not be surveyed, and second, that the depot not be identified by name. Both restrictions were adhered to.

F. ANALYSIS

The survey responses are analyzed by correlating questions clustered in each category to appropriate other questions in order to explore the stated relationships. The

categories are: perceptions of CAP, communication, and continuing at the depot. Whether correlations exist or do not exist are determined by the significance level. If the significance level is greater than .05, a relationship exists. Correlations are conducted according to group, so that it is possible for a relationship to exist for one group but not for another. Again, there are four groups: control, moratorium, studied, and a combination of moratorium and studied. The correlation coefficient, significance level, and r^2 are presented for every correlation that did not exceed .05 significance. The correlation coefficient expresses the strength of the linear relationship between the two variables. The closer the coefficient is to +1 or -1, the stronger the relationship. r^2, the square of the correlation coefficient, is stated for each relationship. It defines the proportion of change in the dependent variable which is explained by the independent variable.

Relative frequencies are determined for each of the critical questions. Relative frequencies are also reported according to group, and provide further information about the relevant relationship.

Means and standard deviations for the critical questions for each group are listed in Appendix C.

The interview data is also clustered into three categories: effectiveness, efficiency, and morale. The interview data is reported to provide information concerning

these categories and their relationships. This data is not analyzed statistically but is used to provide information about the relationship and lead to further research. Representative responses are selected for inclusion in the next chapter.

V. FINDINGS

This chapter is divided into two sections: Survey and Interviews. The findings of our survey of depot employees is Section A, followed by the findings of our interviews of depot managers in Section B.

A. SURVEY OF DEPOT EMPLOYEES

The instruments used in our study were a survey administered to three groups of employees and interviews with depot managers. The three groups consisted of a Control Group of 53 employees, a group of 42 whose jobs were placed under a moratorium for two years (Moratorium Group), and a group of 18 employees who were either studied and the functions remained in-house or studied and the function was contracted out (Studied Group). The combination of Moratorium and Control Groups comprise the "Moratorium and Studied Group," with the commonality of having experienced the threat or actuality of the Commercial Activities Program. It should be noted that the Moratorium employees are employees of a tenant command of the depot.

Pearson correlation coefficients and frequency analysis have been used for analyzing the data. The frequency analyses provide a relative frequency expressed in percentages with missing values indicated. Pearson correlation measures the relationship between variables and for this a

confidence level of 95% is used. When the significance is greater than 5% the data are considered not reliable. Only correlations with a confidence level of 95% or higher are reported. For example, if only one Group is reported in a correlation, then only that Group's confidence level met the 95% confidence criterion.

r^2, the square of the correlation coefficient, is presented in each appropriate category. r^2 defines the proportion of change in the dependent variable which is explained by the independent variable. Thus r^2 is used in conjunction with each correlation to explain the strength rather than the direction of the relationship.

The correlation coefficient has a range between -1 and +1. The correlation coefficient expresses the strength of the linear relationship between the two variables. The closer the coefficient is to +1 or -1, the stronger the relationship. A negative correlation coefficient simply means that one question is answered positively while its correlated question is answered negatively. For example, one could predict that if an employee responded positively to a question concerning satisfaction with his or her job, that employee would respond negatively to a question concerning their likelihood to quit. For this example, a coefficient of -.75 would indicate that, from this particular sample, one could say that the population from which the sample is drawn would also show a coefficient of -.75 at a given confidence level.

Certain questions have been selected from the 49 questions asked in the survey instrument. The selected questions are considered critical to this study, and are listed with their means and standard deviations in Appendix C. These selected questions are organized into three categories: Commercial Activities Program, Communications, and Continuing to Work at the Depot. Each category is addressed by examining the frequency of possible responses of questions in the category, and by correlating the questions with appropriate other questions. Only the significant or interesting results are presented and discussed.

1. Commercial Activities Program

Two questions about the Commercial Activities Program (CAP) were correlated with each other and with other questions to identify certain practices that may affect job performance and employee attitudes toward the depot since CAP began. These correlations along with their relative frequencies are provided.

"Job performance" and "attitude toward the depot" are correlated with other questions. First job performance is correlated with five other questions. The relative frequencies for job performance are provided with the first correlation; for subsequent correlations only the relative frequency for the correlated question is provided. Following the job performance correlations, one question is correlated with attitude toward the depot. Frequencies for attitude and the correlated question are provided.

This analysis (see Table 1) examines the relationship between job performance since CAP and the explanation of changes affecting a work group by the supervisor.

TABLE 1

Relative Frequencies by Group

Since the contracting out program started at the depot, doing a good job has become:

	Control	Moratorium	Studied	Combined
more important	24.5	19.0	38.9	25.0
no change	58.5	40.5	16.7	33.3
less important	0.0	33.3	33.3	33.3
don't know	17.0	7.1	11.1	8.3
My supervisor explains changes ahead of time to my work group				
always	5.7	7.1	11.1	8.3
most of time	52.8	23.8	55.6	33.3
sometimes	35.8	61.9	22.2	50.0
never	5.7	7.1	11.1	8.3

The Moratorium Group indicates a coefficient of .27 with a significance of .04 and a r^2 of .07. Although the responses of the Moratorium Group are positively correlated, the relationship is weak, as indicated by the r^2 of .07.

The relative frequencies indicate that the Moratorium Group believes it receives less explanations from its supervisors, in contrast to the Control and Studied Groups.

This analysis (see Table 2) examines the relationship between job performance since CAP and receiving plenty of notice of changes that affect the individual employee.

For this correlation, the significance exceeded our criterion. The relative frequencies indicate that Control, Moratorium, and Studied Groups believe in doing a good job, but some members do respond in the less important category. None of the Control members responded in the less important category. The Moratorium Group again indicates they do not receive as much notice of changes as the other groups, and have the highest percent (19%) in the "never" category.

TABLE 2

Relative Frequencies by Group

I get plenty of notices about changes that affect me:

	Control	Moratorium	Studied	Combined
always	0.0	7.1	16.7	10.0
most of time	41.5	19.0	38.9	25.0
sometimes	43.4	54.8	33.3	48.3
never	8.0	19.0	11.1	16.7

This analysis (see Table 3) examines the relationship between job performance since CAP and fair treatment when changing jobs.

The Control Group indicates a coefficient of .25 with a significance of .04 and a r^2 of .06. For the Control Group,

TABLE 3

Relative Frequencies by Group

I was treated fairly the last time I changed jobs at the depot:

	Control	Moratorium	Studied	Combined
agree strongly	37.7	19.0	16.7	18.3
agree	17.0	4.8	16.7	8.3
neutral	7.5	0.0	0.0	0.0
disagree	1.9	0.0	0.0	0.0
disagree str.	0.0	4.8	33.3	13.3
haven't changed	32.1	69.0	22.2	55.0
missing	3.8	2.4	11.1	5.0

responses to being treated fairly the last time a job change was made have a positive relationship with the importance of doing a good job since CAP. The r^2 indicates that 6% of the variation in being treated fairly can be explained by the importance of doing a good job since CAP began. Those who feel they were treated fairly are more apt to feel doing a good job has become more important or their attitude toward doing a good job has not changed.

Since a high proportion of respondents for the treated fairly question have not changed jobs, or the data is missing, this frequency is difficult to interpret.

This analysis (see Table 4) examines the relationship between the importance of job security and job performance since CAP.

TABLE 4

Relative Frequencies by Group

Job security as a reason to work at the depot is:

	Control	Moratorium	Studied	Combined
very important	77.4	59.5	66.7	61.7
important	17.0	23.8	11.1	20.0
somewhat imp.	1.9	7.1	16.7	10.0
little imp.	1.9	4.8	0.0	3.3
of no imp.	1.9	2.4	5.6	3.3
missing		2.4		1.7

The Control Group shows a coefficient of .47 with a significance of 0.00 and a r^2 of .22. The relationship of the Control Group responses to these two questions is particularly significant. The linear relationship between doing a good job and the importance of job security is strong, and is expressed in the context of the initiation of the contracting out program. One can conclude that employees in this group who feel job security is important also regard doing a good job, since the contracting out program began, as important.

The frequencies for the Moratorium Group and the Studied Group show that both of these groups value job security as a reason for working at the depot. It is interesting that these groups do not regard job security as important as the Control Group.

This analysis (see Table 5) examines the relationship between job performance since CAP and one's attitude toward the depot.

TABLE 5

Relative Frequencies by Group

Contracting out of government services has caused my attitude toward the depot to:

	Control	Moratorium	Studied	Combined
improve	1.9	0.0	11.1	3.3
stayed the same	45.3	21.4	33.3	25.0
decline	50.9	78.6	55.6	71.1

The Moratorium Group shows a coefficient of .27 with a significance of 0.04 and a r^2 of .07. The Studied Group shows a coefficient of -.47 with a significance of .02 and a r^2 of .22. This coefficient from the Moratorium Group can best be explained by referring to the frequency tables presented below for these two questions. No employees in this group indicated that their attitudes had improved. 79% of these employees indicated that their attitudes had declined. 73% of the employees from this group indicated that doing a good job has become less important or that there is no change in the importance of doing a good job. Clearly this group shows more negative effects from CAP.

The strong negative correlation of the Studied Group is interesting because these employees have been directly affected by CAP. Although over half indicated that their attitudes have declined since CAP, 38% feel that doing a good job is more important[5] than prior to CAP.

In this last examination of the Commercial Activities Program category, attitude toward the depot is correlated with supervisors explaining changes affecting the work group ahead of time. Frequencies for both questions are provided.

This analysis (see Table 6) examines the relationship between one's attitude toward the depot and receiving explanations of changes from supervisors.

TABLE 6

Relative Frequencies by Group

Contracting out of government services has caused my attitude toward the depot to:

	Control	Moratorium	Studied	Combined
improved	1.9	0.0	11.1	3.3
stayed the same	45.3	21.4	33.3	25.0
declined	50.9	78.6	55.6	71.1
My supervisor explains changes ahead of time to my work group				
always	5.7	7.1	11.1	8.3
most of time	52.8	23.8	55.6	33.3
sometimes	35.8	61.9	22.2	50.0
never	5.7	7.1	11.1	8.3

[5]The Control Group also shows a negative correlation, but the significance level of 94% exceeds our criterion. The control group has not been directly affected by CAP.

The Studied Group shows a coefficient of .43 with a significance of 0.04 and a r^2 of .19. This brings the Moratorium and Combined Group to a coefficient of .33 with a significance of .01 and a r^2 of 0.11. Responses from the Studied and Combined Groups show a moderate linear relationship between the questions. The r^2 for the Studied Group indicates that 19% of the change in one's attitude is explained by the supervisor's notice of changes.

The frequencies for all four groups show a decline in attitude toward the depot. The Moratorium Group shows the least awareness of changes.

2. Continuing at the Depot

Four questions concerning the likelihood of continuing at the depot are correlated with appropriate other questions. Frequencies for each correlation are presented below. The four questions deal with the perception of one's importance to the depot, the perception of the importance of one's work to the depot, the likelihood of continuing to work at the depot, and job security as a reason to work at the depot.

In this grouping, "job security" is correlated with two questions. Relative frequency for job security is provided with the first correlation; for the second, only the frequency for the correlated question is provided.

This analysis (see Table 7) examines the relationship between the importance of job security and the preference for government or private company employment.

TABLE 7

Relative Frequencies by Group

Job security as a reason to work at the depot:

	Control	Moratorium	Studied	Combined
very important	77.4	59.5	66.7	61.7
important	17.0	23.8	11.1	20.0
somewhat imp.	1.9	7.1	16.7	10.0
little imp.	1.9	4.8	0.0	3.3
of no imp.	1.9	2.4	5.6	3.3
missing		2.4		1.7

If pay, job, and benefits (pension, health insurance, etc.) are similar, I prefer to work for:

government	32.1	71.4	44.4	63.3
no preference	28.3	9.5	33.3	16.7
private company	39.6	19.0	16.7	18.3
missing			5.6	1.7

The Moratorium Group shows a coefficient of .47 with a significance of 0.00 and a r^2 of .22. The correlation for this Group is strong. The r^2 of 22% shows a strong relationship between preference for government work and job security for this group.

The frequencies indicate that all groups value job security as a reason to work at the depot. The Moratorium Group most clearly indicates a preference for working for the government. The Control Group is fairly evenly divided

between working for the government and a private company. The Studied Group shows a strong preference for government work over private company work.

This analysis (see Table 8) examines the relationship between importance of job security and the expectation to continue working at the depot.

TABLE 8

Relative Frequencies by Group

I expect to continue working at the depot:

	Control	Moratorium	Studied	Combined
agree strongly	49.1	23.8	50.0	31.7
agree	18.9	42.9	22.2	36.7
neutral	17.0	11.9	0.0	8.3
disagree	7.5	9.5	0.0	6.7
disagree str.	7.5	11.9	16.7	13.3

The Control Group has a coefficient of .25, significance of .04, and a r^2 of .06. The Moratorium Group has a coefficient of .38, a significance of .01, and a r^2 of .14. The Moratorium Group shows a higher correlation between expecting to continue and job security. The Control Group, however, still indicates a positive correlation between the two questions. The r^2 for the Moratorium Group indicates that 14% of the variation in one variable is explained by the other variable. For the Control Group the strength of the relationship is less, 6%.

94% of the Control Group values job security as important or very important. The other two groups are 83% and 72% respectively. This is interesting because the Control Group has had no experience with CAP, while the other two groups have.

The Studied Group expects most highly that they will continue working at the depot, with 72% agreeing, compared to 68% and 66% of the Control and Moratorium Groups.

In this grouping, three questions are correlated with the employee's sense of importance to the depot. The relative frequency for the sense of importance is provided with the first correlation only.

This analysis (see Table 9) examines the relationship between feeling like an important part of the depot and thinking one's work is important to the depot.

The Control Group shows a coefficient of .48, a significance of .00, and a r^2 of .23. The Moratorium Group has a coefficient of .69, a significance of .00, and a r^2 of .48. The Studied Group has a coefficient of .65, a significance of .00, and a r^2 of .43. The Combined Group has a coefficient of .68, a significance of .00, and a r^2 of .46. Responses to these questions from all groups indicate that a very strong relationship exists between the responses to the questions. One can conclude that when employees feel that their work is important, they also feel like an important part of the depot.

TABLE 9

Relative Frequencies by Group

I feel like I am an important part of this depot:	Control	Moratorium	Studied	Combined
agree strongly	30.2	40.5	61.1	46.7
agree	15.1	11.9	11.1	11.7
neutral	22.6	14.3	0.0	10.0
disagree	11.3	16.7	5.6	13.3
dis. strongly	18.9	16.7	16.7	16.7
missing	1.9		5.6	1.7
My work is this important to the depot:				
very important	58.5	66.7	61.1	65.0
important	17.0	14.3	22.2	16.7
somewhat imp.	15.1	7.1	5.6	6.7
of little imp.	5.7	7.1	0.0	5.0
of no imp.	3.8	4.8	5.6	1.7
missing			5.6	1.7

The frequencies for the Studied Group show that members of that group believe more strongly in their importance to the depot. 72% of this group agree or agree strongly that they are an important part of the depot, and 83% of this group believe their work is important to the depot. About half of the Control and MOratorium Groups believe they are an important part of the depot, and 75% to 80% believe their work is important to the depot.

This analysis (see Table 10) examines the relationship between feeling like an important part of the depot, and ones' willingness to change jobs.

TABLE 10

Relative Frequencies by Group

I don't mind changing jobs as long as pay is the same:

	Control	Moratorium	Studied	Combined
strongly agree	28.3	9.5	33.3	16.7
agree	13.2	14.3	16.7	15.0
neutral	17.0	7.1	5.6	6.7
disagree	7.5	11.9	0.0	8.3
dis. strongly	28.3	50.0	27.8	43.3
missing	5.7	7.1	16.7	10.0

The Studied Group shows a coefficient of .46, significance of .04, and a r^2 of .22. These responses indicate that a strong relationship exists for the members of the Studied Group between feeling like an important part of the depot and one's willingness to change jobs. This is an interesting correlation since this group has been directly impacted by CAP.

50% of the Studied Group don't mind changing jobs. This is interesting because either they have changed jobs because of CAP, or they were facing a job change during the study.

61% of the moratorium group definitely do not want to change jobs. Over all of the groups there is a higher percentage of responses than usual in the "disagree strongly" category.

This analysis (see Table 11) examines the relationship between feeling like an important part of the depot and the expectation to continue working at the depot.

TABLE 11

Relative Frequencies by Group

I expect to continue working at this depot:

	Control	Moratorium	Studied	Combined
agree strongly	49.1	23.8	50.0	31.7
agree	18.9	42.9	22.2	36.7
neutral	17.0	11.9	0.0	8.3
disagree	7.5	9.5	0.0	6.7
disagree str.	7.5	11.9	16.7	13.3

The Control Group has a coefficient of .44, significance of .00, and a r^2 of .19. The Moratorium Group has a coefficient of .43, significance of .00, and a r^2 of .19. The Combined Group has a coefficient of .28, significance of .02, and a r^2 of .08. Responses of Control and Moratorium Groups are moderately related. The Combined Group's responses are weakly related. When combined with the Moratorium Group, the Studied Group reduces the strength of the relationship.

The frequencies show that approximately half of the Control and Studied Groups "agree strongly" that they will continue to work at the depot. The Moratorium Group does not show as much confidence in its future at the depot, showing a frequency of only 23% for "agree strongly."

In this next grouping, the employee's sense of the importance of the work he or she does is correlated with two questions. The relative frequency for the importance of one's work is provided with the first correlation only.

This analysis (see Table 12) examines the relationship between thinking one's work is important to the depot, and the expectation to continue working there.

TABLE 12

Relative Frequencies by Group

I expect to continue working at the depot:

	Control	Moratorium	Studied	Combined
agree strongly	49.1	23.8	50.0	31.7
agree	18.9	42.9	22.2	36.7
neutral	17.0	11.9	0.0	8.3
disagree	7.5	9.5	0.0	6.7
disagree str.	7.5	11.9	16.7	13.3

My work is this important to the depot:

very important	58.5	66.7	61.1	65.0
important	17.0	14.3	22.2	16.7
somewhat imp.	15.1	7.1	5.6	6.7
little imp.	5.7	7.1	0.0	5.0
no imp.	3.8	4.8	5.6	1.7
missing			5.6	1.7

The Control Group has a coefficient of .23, significance of .05, and a r^2 of .05. The Moratorium Group has a coefficient of .49, significance of .00, and a r^2 of .24. The Combined Group has a coefficient of .35, significance of .00, and a r^2 of .12. These responses indicate that a strong relationship exists between the responses for these two questions for the Moratorium Group, and a moderate relationship exists for the Combined Group. The Control Group's response is weak.

The Studied Group's frequencies show the highest confidence in continuing to work at the depot, as well as placing the highest value on its work. This is shown by its 72% for agree and agree strongly for continuing to work, and 83% for important and very important concerning work.

This analysis (see Table 13) examines the relationship between thinking one's work is important to the explanation of changes ahead of time by one's supervisor.

TABLE 13

Relative Frequencies by Group

My supervisor explains changes ahead of time to my work group:

	Control	Moratorium	Studied	Combined
always	5.7	7.1	11.1	8.3
most of time	52.8	23.8	55.6	33.3
sometimes	35.8	61.9	22.2	50.0
never	5.7	7.1	11.1	8.3

The Control Group has a coefficient of .26, significance of .03, and a r^2 of .07. The Moratorium Group has a coefficient of .29, a significance of .03, and a r^2 of .08. The Studied Group has a coefficient of .42, significance of .05, and a r^2 of .18. The Combined Group has a coefficient of .33, significance of .01, and a r^2 of .11. These responses might suggest that when supervisors explain changes ahead of time to one's work group, employees will also feel that their work is important to the depot. The coefficient for the Studied Group indicates the strongest relationship between supervisors explaining changes and the perception of importance of one's job to the depot.

Only 30% of the Moratorium Group believes that they receive timely notice of changes from supervisors, while approximately 60% of Control and Studied Groups report that they receive notice.

3. Communications

Two communication questions were analyzed to determine the extent of open, two-way communication between supervisors and employees. This analysis provides information about the importance of keeping employees informed of changes affecting them and their work group. Its impact on job satisfaction and the expectation to continue working at the depot is examined.

In this grouping, a question about how much explanation supervisors give employees about changes is correlated

with three questions. The relative frequency for the supervisory explanation is provided with the first correlation only.

This analysis (see Table 14) examines the relationship between upward communication and the supervisor explaining changes affecting the work group.

TABLE 14

Relative Frequencies by Group

My supervisor explains changes ahead of time to my work group:

	Control	Moratorium	Studied	Combined
always	5.7	7.1	11.1	8.3
most of time	52.8	23.8	55.6	33.3
sometimes	35.8	61.9	22.2	50.0
never	5.7	7.1	11.1	8.3

I can talk comfortably with my supervisor concerning work problems:

yes	88.7	83.3	66.7	78.3
no	11.3	16.7	33.3	21.7

The Moratorium Group has a coefficient of .29, significance of .03, and a r^2 of .08. The Studied Group has a coefficient of .58, significance of .01, and a r^2 of .33. The Combined Group has a coefficient of .34, significance of .00, and a r^2 of .12. Responses from the Studied Group

reflect a strong correlation while responses from the Moratorium Group are weakly correlated. This is interesting since the Studied Group has been directly affected by CAP.[6]

Again, the Moratorium Group shows less frequent notice of changes but a high degree of comfort in talking to supervisors. The Studied Group is least comfortable with supervisors. Almost 89% of the Control Group can talk comfortably with supervisors, yet only 58.5% of this group feels that their supervisors explain changes most of the time.

This analysis (see Table 15) examines the relationship between the importance of job satisfaction and the notification of changes by the supervisor.

TABLE 15

Relative Frequency by Group

Job satisfaction as a reason for work here is:

	Control	Moratorium	Studied	Combined
very important	45.3	45.2	61.1	50.0
important	22.6	21.4	16.7	20.0
somewhat imp.	22.6	9.5	5.6	8.3
little imp.	1.9	9.5	5.6	8.3
no importance	5.7	11.9	5.6	10.0
missing	1.9	2.4	5.6	3.3

[6]Responses from the Control Group have a significance level outside the maximum, 6% with a .22 correlation. This is due to about 42% of this group responding in the negative range to the question about the supervisor explaining changes affecting the work group.

The Studied Group has a coefficient of .46, significance of .03, and a r^2 of .22. The Combined Group has a coefficient of .33, significance of .01, and a r^2 of .11. The Studied Group's responses are strongly correlated. This might suggest that when supervisors explain ahead of time most of the changes that affect a work group, an employee will respond that job satisfaction as a reason for working at the depot will be important. When combined with the Moratorium Group, the responses are moderately correlated.

The Studied Group shows the highest percentages in the importance of job satisfaction.

This analysis (see Table 16) examines the relationship between the expectation to continue working at the depot and the notification of changes by the supervisor.

TABLE 16

Relative Frequency by Group

I expect to continue working here:

	Control	Moratorium	Studied	Combined
agree strongly	49.1	23.8	50.0	31.7
agree	18.9	42.9	22.2	36.7
neutral	17.0	11.9	0.0	8.3
disagree	7.5	9.5	0.0	6.7
disagree str.	7.5	11.9	16.7	13.3

The Moratorium Group shows a coefficient of .39, significance of .01, and a r^2 of .15. The Combined Group

shows a coefficient of .28, significance of .02, and a r^2 of .08. Responses of the Moratorium Group to these two questions have a moderate relationship. The relationship of the Combined Group responses is weak.

All three groups are about equally divided between agreeing and disagreeing about continuing at the depot, but none of the Studied Group are neutral.

In this next grouping, two communications questions are correlated with the expectation to continue working at the depot. The relative frequency for the expectation to continue question is provided with the first correlation only.

This analysis (see Table 17) examines the relationship between the expectation to continue working at the depot and the soliciting of opinions from the employee by the supervisor.

TABLE 17

Relative Frequency by Group

My supervisor asks my opinion concerning work:

	Control	Moratorium	Studied	Combined
a lot	20.8	28.6	5.6	21.7
sometimes	64.2	47.6	66.7	53.3
never	15.1	23.8	27.8	25.0

The Control Group shows a coefficient of .33, significance of .01, and a r^2 of .11. The Control Group responded

with a moderate relationship between these two questions. This might suggest that supervisors' asking for their employees opinions on work related matters is accompanied by those employees expecting to continue work at the depot.

The Control Group shows a high percentage of employees whose supervisors ask their opinion. In contrast, the Studied Group shows only 5.6% as "a lot" for this question, and 66% as "sometimes." It is clear that they feel they are not often asked for their opinions about work by their supervisors. Studied employees are asked least often.

This analysis (see Table 18) examines the relationship between the expectation to continue working at the depot and adequate notification of changes that affect the employee.

TABLE 18

Relative Frequency by Group

I receive plenty of notices about changes that affect me:

	Control	Moratorium	Studied	Combined
always	0.0	7.1	16.7	10.0
most of time	41.5	19.0	38.9	25.0
sometimes	43.4	54.8	33.3	48.3
never	8.0	19.0	11.1	16.7

The Moratorium Group shows a coefficient of .39, significance of .01, and a r^2 of .15. The Combined Group shows

a coefficient of .30, a significance of .01, and a r^2 of .09. The frequencies indicate that the correlation is drawn from negative responses to these questions. That is, for the Moratorium Group, 15% of the expectation not to continue is explained by not receiving notice of changes. This might suggest that employees who receive sufficient notice about changes that affect them, respond that they expect to continue working at the depot. The Moratorium Group says it gets notice of changes always or most of the time only 26% of the time, compared to 41% and 54% of the other groups.

B. INTERVIEWS WITH MANAGEMENT

As part of the data collection efforts, interviews were conducted with 12 depot managers who had been directly affected by the CAP. The interviews were structured, with each manager asked 12 open-ended questions. The managers ranged from first level supervisors to fourth level supervisors. Two of the managers did not supervise employees affected by CA, but their work in staff positions brought them in contact with employees affected by CA.

The interview questions were clustered into three categories: Effectiveness, Efficiency, and Morale. All three categories are concerned with the CA program and its impact. For each category a relationship is suggested. At the conclusion of the responses presented in each category, a Finding about the relationship is provided.

The first category addresses how well the depot is able to achieve its objectives. The second category addresses the manager's perception of how the depot is able to manage its resources. The third category solicits opinions about how the CAP has affected depot employees that the manager deals with. First the responses to questions on Effectiveness will be presented, followed by Efficiency and then Morale.

Significant or interesting responses to the interview questions are presented.

1. Effectiveness

Relationship: The effectiveness of the depot has been reduced by the implementation of CAP.

Effectiveness is defined as how well an organization accomplishes its objectives. In order to obtain the manager's perceptions of this characteristic, we asked the following questions:

1. How has contracting out affected the decision-making process?
2. How do you see the CAP affecting the accomplishment of the depot mission?
3. In terms of your particular area, how does CA affect the accomplishment of your objectives?

The following responses concern the effect on the decision-making process.

> I examine decisions more closely. I evaluate them in terms of, 'does it save money; will we keep our jobs.' (Support supervisor)

It has caused extra time for all managers. There are lots of questions about who's supposed to be doing the work. (Support supervisor)

The effect is for top management to take a closer look at better control over worksites and crews they're running. If they're going to be competitive they're going to have to pay more attention to budget. (Support supervisor)

CA studies are a burden on management; it's a constant redo exercise. (Support supervisor)

The following responses concern CA's effect on the depot mission.

The amount of labor and time to get contracts written takes away from fleet support. The main concern of the Navy or civil service is to get the ships out and back to the fleet within the time frame scheduled. Contractors could care less. (Support supervisor)

Our managers are reluctant to farm out work. The net results are rework for the depot and delays on the job...We have deadlines to meet. We have timetables and we hear about meeting them. Contractors don't. (Production supervisor)

Any significant amount of contracting out would put the depot in jeopardy. Several functions have been considered, but you have to look at checks and balances, security, any cost savings, the impact of contractor people on the overhaul schedule. The general attitude toward contracting out is, 'would it be practical?' (Production supervisor)

The following responses concern the effect of CA on the individual manager's accomplishment of objectives.

If we had had time in the beginning we could have done it (the CA study) right. Instead we had to go through several chops to get it right. We kept telling everybody we needed more time. (Support supervisor)

Before we could control performance. Now we have to go through (the contracting officer). Each step loses in the translation. (Production supervisor)

We had five days to come up with a plan for contracting out, then it took a year to hire a contractor. So our janitors quit, and we couldn't get replacements.

The work wasn't done; the shops were left hanging. We had to have shop people fill in to do the work. Pretty expensive. (Production supervisor)

When we had control of people we could get things done. (Production supervisor)

For four months I couldn't work at my desk while we were doing the CA study. It took two and a half months alone to collect the data on the functions! (Support supervisor)

(Contracting out) slows up completion of the job. Response time of contractors for urgent requests has been, 'so what?' so our people have to improvise to get a job done. (Support supervisor)

CONCLUSIONS CONCERNING EFFECTIVENESS IMPACT OF CAP: These responses do not indicate a strong relationship between CA and depot effectiveness although responses to the first question do indicate concern for better use of resources. Responses to the other two questions suggest that managers are uncomfortable with CAP because of lack of control, confusion about CAP requirements, and their skepticism about a contractor's dedication to the mission of the depot.

2. Efficiency

Relationship: The efficiency of the depot is improved by implementing CAP.

Efficiency is defined as how well the organization manages its resources, i.e., the ratio of inputs to outputs. Questions in this category include:

1. Is contracting out the best way to obtain efficiency in government services?
2. Do you think that, if the government has to reduce costs, that CA is an effective way to do it?

3. In what ways has contracting out changed the way you manage your resources?

4. What can federal managers do to make their services competitive with the private sector?

5. Are you more conscious of controlling your grades (are you less likely to promote)?

6. What kinds of communication problems do you have with contractor employees?

The following responses concern contracting out as a way to obtain efficiency, and whether CA is an effective way to reduce costs.

> No. CAP is not the way to be efficient, because you have no control over it. If you work for civil service, I can tell you what to do, but we can't even talk to contractor employees. (Production supervisor)

> No. I don't think the government saves money by contracting out. We take a ship and repair it...we put in the extras to make it run...we do it right. (Production supervisor)
> Yes, contracting out can reduce costs, but only if you are very selective about what's contracted out. Only non-critical work. Let us worry about the critical work. (Support supervisor)

> No, CA is not an effective way, but applying MEO approach may be helpful. (Support supervisor)

> The result of contracting out is that the job is not done as well, so there is no real cost savings. And the administrative costs are higher. (Production supervisor)

> No. I don't know how they reduce costs. We're just told our ceiling is reduced by X amount and we have to meet that. It would be better from a management standpoint if we knew how and why decisions were determined. (Production supervisor)

> NAVFAC does not have enough manpower to inspect the contracts, so many contractors do not finish all they are supposed to, but collect the money anyway.

The contracting world knows poor workmanship won't be pursued. (Support supervisor)

MEO has forced us to clean up our act. (Support supervisor)

The following responses concern changes the manager makes in managing resources and controlling grades.

I used to encourage upward movement in all areas. People can still move up, but we take a very hard, critical look at the people....I will use temporary help instead of permanent help now....I will use a pipefitter and a helper where before I would use two pipefitters. (Support supervisor)

Becoming a manager does not give one the right to run right over people--so my management philosophy hasn't changed. I'm more firmly convinced that a manager must be concerned with people and how changes affect them. (Support supervisor)

I examine positions very carefully now. (Support supervisor)

We don't control money (for wages). I have the whole Navy to worry about that for me. We have grade restrictions and ceilings. We don't develop them on our own. I don't use promotion as a reward anyway. Our grades are not inflated. (Support supervisor)

These responses are ways that federal managers can become more competitive.

Lots of ways if they'd let you do them...make sure the worker has those documents, material, equipment and tools needed to do the job, and be able to provide good clear instructions on how to do the job...Give the individual the latitude to make decisions. Individuals are not willing to delegate to the mechanic because of the system of each supervisor being accountable for all his people. So supervisors give detailed instructions to people and won't let them make decisions. (Production supervisor)

We need to be able to fire people. The paperwork is so monumental (to fire someone) that we'll accept a person rather than fire. Discipline of depot employees is hard to enforce. We can only shuffle people around. (Production supervisor)

MEO has made us more competitive. It took a lot of time but it paid off. (Support supervisor)

Reduce paperwork. Too many guidelines take away the individual's initiative and ability to make decisions. (Production supervisor)

Get into MEO and make it work. Reorganize the troops to have better ties between them, so one general foreman has enough resources and control to get the job done. (Support supervisor)

Simply becoming managers and ensure that the methodologies that apply to the situation will be a solution to that situation and not make judgments based on past practices. Make sure the approach is a solution, not just an application of existing answers. Must be concerned with people and keep them informed. (Support supervisor)

The following responses concern communications problems with contractor employees.

We can't even talk to contractor employees. We have to call the contracting office and by the time you can get (through to) the contractor, you may have killed two hours. (Production supervisor)

The interaction between contractor and depot people has been negative--part of settling in, part learning expectations. When shop people (non-supervisory) talk directly to contract people though, they get a good response. (Support supervisor)

I don't have much communication with contractor people. (Support supervisor)

CONCLUSIONS CONCERNING EFFICIENCY IMPACT OF CAP:

Responses to these questions indicate that managers are conscious of the need to become efficient and some attribute this consciousness to CAP. Several responded that using one phase of CAP, the MEO can pay efficiency dividends. These responses provide an insight into the efficiency-related problems faced by depot managers.

3. Morale

Relationship: The length of the CAP study has an adverse effect on the morale of the people under study.

The last category of interview questions is Morale. The questions are directed toward the manager's observations of his or her employees and any discernible impact CAP has had on those employees. The questions in this section are:

1. How long was the time period your people were under study?
2. How was their work affected during that period?
3. Can you see a difference in the quality of performance of your people now that CAP is taking place?

These responses concern the time period under study.

> About a year. Service deteriorated because our people quit and shop people had to fill in on volunteer basis. (Production supervisor)

> About a year. As soon as word got out, people started looking for other jobs. (Production supervisor)

> Our employees were not affected. The mock RIF reassured them. We just told them, 'do the best you can.' (Support supervisor)

> If we had known the study would take so long we would have kept the information confidential. (Production supervisor)

> Six to eight months. (Support supervisor)

> Four months minimum. (Support supervisor)

> Not sure--a long time. (Support supervisor)

These responses concern CAP's effect on employees and the level of service.

> At first when the study was announced we were worried. Then we had high hopes our bid would win. Then we

lost, and morale plummeted. Then we found out the contractor was offering $5 dollars an hour, with no guarantee of a 40 hour week, and no contract. (Support supervisor)

Drastic change in attitudes. Some employees feel the government is trying to eliminate them. It's like people with their heads in guillotines, waiting for them to drop. Management has lost credibility. (Support supervisor)

Completely disastrous in one area. People took jobs elsewhere at the depot--which helped the depot overall because they were more traditional workers. But we never brought the unit back to acceptable levels. We had a moral obligation to tell people who applied about the situation, so we had a hard time attracting competent workers. (Support supervisor)

I personally went around to all work centers talking to employees, keeping them informed of where we were and progress to date. (Support supervisor)

Morale was affected, but my time wasn't wasted. We got educated about what CA is and saw we could be vulnerable to be studied in other areas. (Support supervisor)

Our people have sharpened up and become very competitive and watchful. We tasked the troops with passing all the information about jobs they were doing back to us so we could write a realistic description of the function. (Support supervisor)

If you have to contract out 30% of work, should tell people. They're adults. They'll find out anyway. And then you have got resentment. (Production supervisor)

There were lots of rumors but we squashed them by telling them the facts. Our primary job is to keep the facts out there, keep the troops informed. After they got the facts, the rumors stopped. (Support supervisor)

CONCLUSIONS CONCERNING MORAL IMPACT OF CAP: These responses suggest that the length of a CA study adversely affects the morale of employees. Several managers indicate that the CA studies had a negative impact on their workforce

although all managers responded that the performance of their employees did not deteriorate. However, the level of service did decline because employees whose jobs were under study left to take jobs in protected departments or left the depot altogether. This action creates a severe handicap for a manager. The information suggests that limiting the time period a function is under study can lessen the negative impact of the study.

C. CONCLUSION

The findings of the survey data are summarized according to group. For each group, significant or interesting frequencies are highlighted here, as well as relationships which explain variance of 20% or higher.

The interview findings are summarized following the survey data.

1. Control Group

This group is fairly evenly divided between preference for working for the government and preference for working for a private company. Almost all say job security is important or very important. They have a high expectation of continuing at the depot, and none said doing a good job since CAP had become less important. They say they receive notice of changes, and about half say they can talk comfortably with supervisors. Almost half consider job satisfaction very important.

22% of their attitude toward doing a good job is explained by the importance of job security. 23% of the

feeling that they are an important part of the depot is explained by thinking their work is important to the depot.

2. Moratorium Group

The Moratorium Group feels they do not receive adequate notice of changes, either from their supervisors or other sources. Their attitude toward the depot has declined considerably, although they indicate the strongest preference for government work. They believe their work is important. Two thirds definitely do not want to change jobs, with a high percentage "disagreeing strongly" to this proposal.

22% of their preference for government work is explained by the importance of job security. 48% of the feeling of importance to the depot is explained by thinking their work is important. 24% of the expectation to continue working there is explained by thinking their work is important.

3. Studied Group

A high percentage believe doing a good job has become more important since CAP, although over half say their attitude toward the depot has declined. They regard job security as important, although not as important as the Control Group. This group feels they are an important part of the depot, and have the highest expectation of continuing to work there. About half say they do not mind changing jobs. This group rate job satisfaction the highest, though they are least comfortable talking with supervisors and their opinions are

solicited least often by supervisors. The group shows a strong preference for government work over private company work.

43% of the feeling they are an important part of the depot is explained by thinking their work is important. 22% of their willingness to change jobs is explained by feeling they are an important part of the depot. 33% of the ability to talk comfortably with supervisors is explained by receiving explanations of changes from supervisors. 22% of their job satisfaction is explained by supervisors notifying them of changes.

4. Interviews

The interviews illustrate the frustrations the managers have with fulfiling their responsibilities while implementing a program that reduces their control. Their reaction to CAP range from helplessness to confidence. It appeared that one department handled the implementation considerably better than the others. This department had more experience with the pre-CAP program, CITA, than the other departments, and were able to incorporate the MEO process into their way of doing business.

The managers expressed concern for the welfare of employees. The researchers were impressed by some managers taking personal interest in ensuring that employees were kept informed.

The managers indicated frustration with the CAP procedure, reflecting the difficulty of tackling a new task

that OMB specified should be implemented "with a minimum of internal instructions." This is a double-edged sword because at the same time the managers complained of having too much paperwork.

The responses concerning the manager's latitude to make decisions was interesting. These managers were interested in efficiency and effectiveness, and understood that decisions made close to the operating level are often the most effective.

In the next chapter, Discussion of Findings, the relationships for the survey findings are explained, and the interview findings are discussed.

VI. DISCUSSION OF FINDINGS

In this chapter we discuss why relationships exist and speculate about some of those that do not exist. Some assumptions were necessary in order to analyze the data. These assumptions are as follows:

1. That the survey adminstered is an appropriate indication of the effects of the Commercial Activities Program (CAP) on the work force of a depot.
2. That the manner in which the CA program has been conducted can produce negative results. The experience of CAP for a depot employee, either displaced or under a morotorium, creates a more negative attitude toward the depot than the attitude of employees who have not been studied. Therefore, we expected to find a difference between the responses of the Control Group and those who had been exposed to CAP.
3. That the sample of data collected from each group is representative of the population of that group.
4. That responses from individuals in each group are equally valid.

We have clustered our critical survey questions into three categories. They are:

1. Commercial Activities Program
2. Communications
3. Continuing to Work at the Depot

Each category was addressed by suggesting relationships between questions. Pearson's correlation and a significance level was used to determine the strength of a relationship. The criterion for a relationship is based on the significance level. If the significance level is below .05, a relationship exists. The results are reported below and Table 19 summarizes the correlations.

A. DISCUSSION OF CAP CATEGORY FINDINGS

1. Job Performance And Supervisor Explaining Changes

Job performance since CAP started is correlated with explanation of changes affecting a work group from the supervisor.

These two questions are positively correlated for the Control and Moratorium Groups, and negatively correlated for the Studied Groups.

A relationship exists only for the Moratorium Group. The relationship is weak, as indicated by the r^2 of .07. The informal organization has developed sources outside the organization, as well as maintained a positive attitude towards doing a good job. We expected their attitude towards doing a good job to decline. The degree of professionalism of the occupation of this group may explain this attitude. The weak relationship precludes any clear conclusion to be drawn for this group.

2. Job Performance And Notice Of Changes

Job performance since CAP started is correlated with an individual receiving notices about changes affecting him or her.

These two questions are negatively correlated for the Control and Studied Groups, and positively correlated for the Moratorium Group.

No relationships exist for any group. The question was similar to the question examined above. Therefore, it would seem that the relationships would be the same. However the Mortaorium Group's response indicates less of a relationship. This can be attributed to the weakness of the above response.

No conclusions can be drawn about the notice of changes, and the attitude towards doing a good job.

3. Job Performance And Fair Treatment

Job performance since CAP started is correlated with being treated fairly the last time an employee changed jobs.

These two questions are positively correlated for all three groups.

A relationship exists only for the Control Group. The relationship is weak, with a significance of .04 and an r^2 of .06. The weakness of the relationship in this group and the lack of relationship in other groups is probably due to the number of employees who have not changed jobs. In retrospect the question should have been rephrased since it is usually employees who have not been able to change jobs who feel unfairly treated.

4. Job Performance And Job Security

Job performance since CAP started is correlated with the importance of job security as a reason for working at the depot.

These questions are positively correlated for the Control and Studied Groups, and negatively correlated for the Moratorium Group.

There is a relationship for the Control Group since the significance level is .00. The relationship is strong since the r^2 is .22. We expected relationships for all groups since job security is usually important to government employees. The lack of a relationship for the other groups is not too surprising since they have faced uncertainty about their jobs. Even though the Studied Group found jobs elsewhere at the depot, the uncertainty is probably still haunting them.

The Moratorium Group is probably still bothered by the uncertainty facing them.

5. Job Performance And Attitude Toward Depot

Job performance since CAP started is correlated with the change in one's attitude toward the depot since CAP started.

These questions are negatively correlated for Control and Studied Groups, and are positively correlated for the Moratorium Group.

A relationship exists for the Moratorium and Studied Groups. The significance levels for these groups are .04

and .02 respectively. No relationship exists for the Control Group. Since it has not been directly affected by CAP this is not surprising. We expected a negative relationship from the Studied Group since they have faced changes in peer relationships or uncertainty about their future at the depot.

The positive relationship for the Moratorium Group was expected to be due to negative responses but this was not true. The fact that this Group belongs to a tenant activity and not the depot could explain this.

6. Attitude Toward Depot And Supervisor Explaining Changes

Attitude toward the depot since CAP started is correlated with change notices from supervisors that affect the work group.

These two questions are positively correlated for all three groups.

A relationship exists for the Studied Group. The significance is .04 and the r^2 is .19. This is not surprising since several of this group have changed jobs due to CAP. Their response reflects the "settling in" to a new work environment and a residual apprehension about CAP.

Although the Moratorium Group showed a positive correlation, we expected a stronger relationship. The attitude decline is not surprising, but may be due to several factors. The notice of changes from supervisors is not related to attitude decline.

B. DISCUSSION OF THE CONTINUE TO WORK AT DEPOT CATEGORY FINDINGS

1. Job Security and Employer Preference

Job security as a reason to work at the depot is correlated with one's preference for working for the government or a private company.

These two questions are positively correlated for all three groups.

A relationship exists for the Moratorium Group. The significance for this group is .00 and the r^2 is .22. We expected a strong relationship for all three groups because of the value government employees usually place on job security. The moderation of the Moratorium Group's relationship may be an indication of continued uncertainty for them, with some exploring outside job opportunities.

Job security may not be as important to government employees as we thought.

2. Job Security And Expectations To Continue

Job security as a reason to work at the depot is correlated with the expectation to continue working at the depot.

These two questions are positively correlated for all three groups.

Relationships exist for Control and Moratorium Groups but a relationship does not exist for the Studied Group. The postponement gained by the Moratorium Group could explain their expecting to continue at the depot. Since the Control

Group has not been studied there are no reasons why they should not expect to continue so this relationship is not surprising. We expected a strongly negative correlation for the Studied Group but none exists since they have had their job security threatened. No relationship in this group probably indicates that they still feel some uncertainty about their future at the depot.

3. Important Part And Important Work

Thinking that one's work is important to the depot is correlated with feeling like an important part of the depot.

These questions are positively correlated for all three groups.

This hypothesis is accepted for all groups. The significance level is so low (.00 for all groups) that the relationship between these two items cannot be attributed to chance.

These two questions are so similar that the strong relationships for all groups seems inevitable. The respondents made very little distinction between self esteem and the nature of their work. This is interesting because the functions of the Moratorium and Studied groups are regarded as not directly supporting the mission, yet these groups still place value on their work and themselves as a part of the organization.

Because the questions are so similar, it is specious to draw any conclusions about these relationships.

4. Important Part And Willingness To Change Jobs

Willingness to change jobs at the depot is correlated with feeling like an important part of the depot.

These questions are positively correlated for Control and Studied Groups, and negatively correlated for the Moratorium Group.

A relationship exists for the Studied Group, but no relationships exist for the Control and Moratorium Groups. These relationships are not surprising. We expected a relationship for the Studied Group. Once the CAP started the Studied Group had to be willing to change jobs or accept the alternative of quitting. No relationship for the Moratorium Group was expected. Since their training makes them highly specialized, there are no other jobs at the depot for which they qualify.

Perhaps a low level of self esteem accounts for the lack of relationship for the Control Group.

This analysis is interesting since the Studied Group has been directly affected by CAP. One can explain with 96% certainty that when employees from a population similar to the one from which our sample was drawn, feeling like an important part of the organization covaries with their willingness to change jobs.

5. Important Part And Expectations To Continue

The expectation to continue to work at the depot is correlated with feeling like an important part of the depot.

These two questions are positively correlated for Control and Moratorium Groups, and are negatively correlated for the Studied Group.

A relationship exists for the Control and Moratorium Groups. The significance level for both is .00. Both groups have an r^2 of .19. This relationship is not as strong as expected. This is probably due to the Moratorium Group's uncertainty, but the Control Group's relationship is not obvious. The Studied Group's lack of relationship reflects some ambiguity in their perceptions about themselves and their future.

6. Important Work And Expectations To Continue

The expectation to continue to work at the depot is correlated with the feeling of the importance of one's work to the depot.

These two questions are positively correlated for Control and Moratorium Groups. No correlation exists for the Studied Group.

A relationship exists for the Control and Moratorium Groups, but no relationship exists for the Studied Group. Again, the important work question is so similar to the important part question discussed above, the similarity in responses is not surprising and the examination is redundant.

7. Important Work And Supervisory Explanation Of Changes

The importance of one's work to the depot is correlated with the supervisor explaining changes ahead of time that affect the work group.

These two questions are positively correlated for all three groups and relationships exist for all groups.

When supervisors explain changes ahead of time they are satisfying one of the basic needs of employees--that of recognition. It is not surprising that employees would react to this by feeling that their work is important to the depot.

C. DISCUSSION OF COMMUNICATIONS CATEGORY FINDINGS

1. Supervisory Explanation Of Changes And Upward Communication

Being able to talk comfortably with one's supervisor is correlated with supervisors explaining changes affecting a work group ahead of time.

These two questions are positively correlated for all groups.

Relationships exist for Moratorium and Studied Groups but no relationship exists for the Control Group. The Studied Group shows a strong relationship, with an r^2 of .33. The Moratorium relationship is very weak, with an r^2 of .08. The strength of the Studied Group is surprising since many are in new positions. Apparently the settling in with a new supervisor has been accomplished already. The weakness of the Moratorium Group relationship may be due to the "us-them" syndrome of groups. When the moratorium employees initiate communication they are comfortable; when supervisors initiate their reaction is apprehensive or guarded.

2. Supervisory Explanation Of Changes And Job Satisfaction

Job satisfaction as a reason for working at the depot is correlated with the supervisor explaining changes ahead of time.

These two questions are positively correlated for all groups.

A relationship only exists for the Studied Group, with an r^2 of .22. We expected to find all three groups with a relationship. However, communication with one's supervisor is not a foregone conclusion for all groups. The Moratorium Group shows less notice from supervisors. The Control Group's notice of changes is not as positive as their job satisfaction.

This relationship is not as evident as we expected.

3. Supervisory Explanation Of Changes And Expectations To Continue

The expectation to continue working at the depot is correlated with the supervisor explaining changes ahead of time.

These questions are positively correlated for all three groups.

A relationship exists for the Moratorium Group, but no relationship exists for Control and Studied Groups. These relationships are surprising because we expected a relationship to exist for the Studied Group since they have kept their jobs or found new ones at the depot. We did not

expect a relationship to exist for the Moratorium Group, since uncertainty still affects them.

We expected a relationship for the Control Group although not a strong one. However none existed. Apparently the connection is not as clear as supposed.

4. Expectations To Continue And Soliciting Of Opinions By Supervisor

Supervisors asking for worker opinions on work matters is correlated with the expectation to continue working at the depot.

These two questions are positively correlated for the Control Group, but negatively correlated for the Moratorium and Studied Groups.

A relationship exists for the Control Group, which has an r^2 of .11. There is no relationship for Moratorium and Studied Groups. This relationship was not expected to be strong. The moderate response of the Control Group confirms the expectation while indicating some support for eliciting information from the operating level in the interests of good management.

Perhaps for the other two groups there are more important factors impinging on the expectation to continue.

5. Expectations To Continue And Amount of Notice of Changes

Receiving plenty of notice when changes are made that affect an individual is correlated with the expectation to continue working at the depot.

TABLE 19

Summary of Correlations

	Control	Moratorium	Studied
CAP			
Job perf./supv. explan.	positive	positive	negative
Job perf./change notice	negative	positive	negative
Job perf./fair treat.	positive	positive	positive
Job perf./job security	positive	negative	positive
Job perf./attitude	negative	positive	negative
Attitude/supv. explan.	positive	positive	positive
Continuing at the Depot			
Job security/work pref.	positive	positive	positive
Job security/continue	positive	positive	positive
Imp. work/imp. part	positive	positive	positive
Change jobs/imp. part	positive	negative	positive
Continue/imp. part	positive	positive	negative
Continue/imp. work	positive	positive	none
Imp. work/supv. explan.	positive	positive	positive
Communications			
Talk supv./supv. explan.	positive	positive	positive
Job satisf./supv. explan.	positive	positive	positive
Continue/supv. explan.	positive	positive	positive
Wkr. opinion/continue	positive	negative	negative
Change notice/continue	positive	positive	positive

A relationship exists for the Moratorium Group only. This response is identical to the results of supervisory explanation of changes and the expectation to continue. The similarity in the questions are the source of the similar response.

D. CONCLUSIONS

The results of our data collection are mixed. Some of the relationships we explored suffered from contingencies we had not anticipated. The cohesiveness and politicization of the Moratorium Group was much stronger than expected. The splitting of the "exposed to CAP" group into Moratorium and Studied Groups make interpretation of data awkward and difficult. The restriction on interviewing people currently under study took some of the wind out of the research. The Studied Group, for example, were all people who had been retained either in their original function or a new job had been found for them. The effort expended to find these people jobs indicates a responsive attitude on the part of the depot to their plight. This effort may have muted some of the anticipated negative effects of CAP.

In general the survey data did not indicate strong enough relationships in new or interesting areas to make the research significant. Probably the central flaw of the survey was the inability to obtain two distinct groups of sufficient size, one control and one studied.

The interview data provides more support for the notion of congruence between strategy and use of resources. The managers indicated frustration with CAP because in this case the strategy and threat of loss of resources conflict. In those cases where managers separated MEO from CAP, their attitudes were not as resistant. The MEO strategy appears to have some value; attached to CAP it becomes a bitter pill.

It is quite obvious that "business as usual" is no longer a way of life for a depot manager. Competition created by CAP forces the manager to adopt an approach similar to that of the profit oriented manager, though the government manager operates without an income statement. This requires innovative solutions to old problems of efficiency and effectiveness, and a careful approach to decision-making. In the final chapter, the researchers provide some ideas to assist the depot in meeting these new challenges.

VII. RECOMMENDATIONS

The recommendations proposed here are designed to assist an activity in managing the change imposed by the CAP. The persistence of the CAP despite vociferous objections, suggests the program is here to stay and that federal managers should recognize and prepare for the contingency. This research is confined to one large naval facility but the organization development approach to managing change is applicable to any size naval facility.

Relatively little objective literature on the government's experience with CAP is available. The researchers recommend that more objective data concerning this program be collected and analyzed for further implementation of CAP and similar programs. Although this research was confined to a single site, the problems identified may be typical of depots of similar size and specialization.

The implementation of CAP "with a minimum of internal instructions" may have appeared to speed the process, but in fact slowed the process down. By moving too fast, without assembling a body of knowledge on the subject, the implementing activities were forced to redo the CAP process unnecessarily. The researchers recommend that programs such as CAP be implemented only after adequate training and instructions. Managers need to be trained in the organization

development approach to understand the system-wide implications of a change such as CAP. Such training could eventually eliminate the need for contracting out of government services since this type of training emphasizes the goal that the organization achieve the most efficient and cost effective operation. The congruence model of organizational behavior can be used as a tool for the process of problem analysis and change. There are ten steps which a depot manager can use.

1. Identify symptoms. This is a critical first step to assure that the real problems are isolated. Problems usually have many symptoms, so it is important to identify all of them.
2. Specify inputs. This leads managers to the system and the environment in which the system functions. Included here are identifying the strategy of the organization, its core mission, supporting strategies and objectives.
3. Identify outputs. This step requires managers to take a look at the outputs at various levels such as individual, work units or group, and department in terms of the desired outputs from strategy and the actual outputs.
4. Identify problems. Anytime actual performance is less than expected performance in the organization, a group or work unit or at individual levels, problems

exist. At this step managers know that problems exist but do not know the cause. It may assist managers to identify costs associated with problems and consequences if the problems are not fixed. Consequences could include losing the function to an outside contractor if the department is not the most efficient and cost effective one.

5. Describe organizational components. At this step, the managers determine the causes of the problem. Do the problems lie with the task, the individual, the informal organization or the formal organization? Are the causes isolated in just one of these components? What are the critical features of this component to the total organization? Answers to these questions lead the manager to the next step.
6. Assess congruence. In this step managers compare the fit of each pair of components, i.e., take a measurement of the fit between task and individuals, task and informal organization, task and the formal organization; individual and informal organization, individual and formal organization, and informal and formal organization.
7. Generate hypotheses about problem causes. First, managers analyze the congruence and then link the analyses with problem identification (Step 4). This provides patterns of congruence and incongruence which lead to problem isolation.

8. Identify action steps. Managers determine the best course of action for correcting the problems and identify steps to implement the change.
9. Solve the problems. Here the managers begin the implementation of Step 8. Managers must remain alert to resistance to change so it can be dealt with early to avoid additional problems.
10. Evaluate the impact of change. Managers must be constantly alert to the impact of change on their employees and to assure that refreezing of new habits take place.

Using this process will assure that managers plan the change, that the change is system-wide, that employees accept the change, and that its implementation goes smoothly.

Managers and supervisors need to become adept at managing change, especially managing employee resistance to change. Once managers acquire these skills, a transition to a new function is much smoother. The Navy's Organization Effectiveness Centers have been very successful in preparing commands for a change in leadership. These same centers also provide training for managers and supervisors on how to identify and deal with resistance to change. Managers experienced with contracting out did two things: they kept their employees informed, and they elicited the cooperation of their employees by having them participate as much as possible in the CAP process. Both of these techniques

are akin to the organization development approach to managing change.

The Moratorium Group displayed a more negative disposition than even the studied employees. The cohesiveness of the Moratorium Group appears reactive rather than proactive. The researchers attribute this to the uncertainty inherent in the "limbo" status of a moratorium. We recommend that moratoriums be avoided altogether. Moratoriums can create a strong informal organization which develops its own goals, e.g., work hard to prevent the contracting-out process, which are incongruent with the goals of the formal organization. Kurt Lewin's three-step process illustrates the evolution of the Moratorium Group, in which the change was usurped by the information organization. A change was directed via the CAP (unfreezing). In the absence of strong direction toward resolution of threat to jobs, group members reacted by rejecting the directed change and developed their own goals (change). The managers by this point had lost control of the change process. Because of the political process to impose a moratorium, the organization had not been able to conclude the change process (refreezing). The informal group accomplished its own refreezing. In view of the results of the data analysis on the Moratorium Group, it appears that a group adjusts better to a change with a definite end, even if jobs are lost, than to a change with an indeterminate end.

The length of time employees are under study can cause unnecessary problems for managers. We recommend that the time limit for any study be 90 days. We also recommend that each year when the depot updates its inventory of commercial activities, all managers and supervisors who have responsibility for functions to be studied receive complete training in the entire CAP process including the concept of CAP, how to prepare performance of work statements (PWS) and most efficient organization (MEO) reports, and how to adapt the techniques of the MEO to efficiency reviews of functions that are exempt from CAP. This training will prevent managers from becoming victims of resistance to change which is easily transferred to subordinate employees.

The upheaval caused by CAP suggests that it not be performed in functions critical to an activity. However, we do recommend that the MEO process be conducted for all functions once and updated annually by functional managers. This efficiency review would become part of the evaluation of the manager's performance. Again, adequate training for this process is essential to keep it from deteriorating into a paperwork drill.

APPENDIX A

SURVEY INSTRUMENT

DO NOT PUT YOUR NAME OR BADGE NUMBER ON THIS SURVEY.

A. WE WOULD APPRECIATE YOUR ANSWERING THE FOLLOWING QUESTIONS ABOUT YOUR JOB AND HOW YOU FEEL ABOUT WORKING AT THE DEPOT.

1. What is your job title?

_____

2. What is your grade or rate?

_____

3. How long have you been at this grade or rate?

_____years _____months

4. Mark on the list below what grade or rate you expect to achieve in the next two years (circle one number).

GS: 1 2 3 4 5 6 7 8 9 10 11 12 13 14

WG: 1 2 3 4 5 6 7 8 9 10 11 12 13 14

WS: 1 2 3 4 5 6 7 8 9 10 11 12 13 14

If you do not expect to be working for the government, check here_____.

5. For your present position, were you trained (check one):

_____"on the job" with no classroom training

_____already had the necessary skills when selected

_____through a training program at the depot.

6. When did you last attend a classroom training program at the depot?

_____about 6 months ago _____never been to one

_____about a year ago _____can't remember

_____more than a year ago

7. When did you last apply for another position at the depot?

_____about 6 months ago _____never applied for different job

_____about a year ago _____can't remember

_____more than a year ago

8. If you have applied for another position during the last twelve months, either at the depot or elsewhere, what were the three most important reasons for applying (check the three most important reasons):

_____improve skills	_____unhappy with old job
_____increase pay	_____reduction in force
_____better career potential	_____have not applied for job
_____more interesting work	_____other reason
_____uncertainty about my future at this job	

FOR THE FOLLOWING FIVE QUESTIONS, MARK YOUR ANSWER BY CIRCLING THE NUMBER ON THE SCALE THAT INDICATES HOW YOU FEEL. For example, for question 9, if you are pretty sure that you will continue working at the depot, but you have some doubts, you would circle the number 2. If you are sure that you are leaving, you would circle the number 5.

QUESTION	SCALE
9. I expect to continue working at this depot.	Continue here 1 2 3 4 5 Not continue
10. I have been thinking about quitting lately.	Not quitting 1 2 3 4 5 Quitting
11. I don't mind changing jobs at the depot as long as the pay is the same.	Changing is okay 1 2 3 4 5 Not okay
12. I was treated fairly the last time I changed jobs at the depot.	Treated fairly 1 2 3 4 5 Unfairly
Check here if you have not changed jobs _____	

For the following seven items, mark the reasons you work for the depot.
If an item is: very important, circle a "1"
important, circle a "2"
somewhat important, circle a "3"
of little importance, circle a "4"
of no importance, circle a "5"

13.	Pay.....	Very important	1	2	3	4	5 Not important
14.	Location.....	Very important	1	2	3	4	5 Not important
15.	Pension and other benefits.....	Very important	1	2	3	4	5 Not important
16.	Job security.....	Very important	1	2	3	4	5 Not important
17.	Job satisfaction.....	Very important	1	2	3	4	5 Not important
18.	Career potential.....	Very important	1	2	3	4	5 Not important
19.	The people you work with.....	Very important	1	2	3	4	5 Not important

B. THE FOLLOWING QUESTIONS ARE ABOUT SOME OF THE ACTIVITIES AT THE DEPOT AND HOW YOU FEEL ABOUT THOSE ACTIVITIES.

20. How much help is your union to you (check one):

_____a lot of help _____a little help _____don't know

21. Have you ever asked your union for help in solving a problem (check one):

_____yes _____no

22. Have you ever asked the Equal Employment Office (EEO) for help solving a problem (check one):

_____yes _____no

23. What depot-related organizations do you belong to?

_____EEO committee _____FWP committee _____Hispanic committee

_____union _____Quality Circle _____other

24. If pay, job, and benefits (such as pension, health insurance, etc.) are similar, do you prefer to work for (check one):

_____government _____private company _____no preference

25. Have you ever worked for a private company? _____yes _____no.

For each of the following items, indicate whether working for the government or a private company would be better:

26. better job security ....._____government _____private company

27. better supervisors ....._____government _____private company

28. better regulations ....._____government _____private company

29. better working conditions..._____government _____private company

30. better pay ....._____government _____private company

31. better control over work...._____government _____private company

32. Why do you think the government is thinking about contracting out some services (check the answers you think are most important):

_____to reduce the number of government employees

_____to improve efficiency _____don't know

_____to cut down costs _____other (explain below)

_____

_____

33. Has contracting out of government services caused your attitude toward the depot to (check one):

_____improve _____decline _____stay the same.

34. Has your workload changed because government services have been contracted out? (check one)

_____more work _____less work _____no change _____don't know

35. Since the contracting out program started at the depot, doing a good job has become

_____more important to you _____no change

_____less important to you _____don't know

C. WE ARE INTERESTED IN HOW YOU FEEL ABOUT YOUR JOB AND HOW YOU ARE INFORMED ABOUT THINGS THAT AFFECT YUU.

Please answer questions 37 to 41 by marking your answer on the scale.

QUESTIUNS	SCALE
36. How important do you think your work is to the depot?	Very important 1 2 3 4 5 Not important
37. How much do you control the amount and quality of your work?	I control completely 1 2 3 4 5 I don't control
38. How much do you like your friends to know that you work at the depot.	Like very much 1 2 3 4 5 Don't like
39. Do you feel like an important part of the depot?	Very important 1 2 3 4 5 Not important
40. How comfortable are you with the people that you work with?	Very comfortable 1 2 3 4 5 Not comfortable

41. Does your supervisor ask for your opinion on work-related matters (check one):

_____a lot _____sometimes _____never

42. Can you talk comfortably with your supervisor about problems you may have with your work? (check one)

_____yes _____no

43. When your supervisor gives you a tough job, you (check one)

_____would rather not do it _____look forward to doing it

_____do the best to do what you can _____never had a tough job

44. Do you have plenty of notice when changes are made that will affect you (check one):

_____always _____most of the time _____sometimes _____never

45. Does your supervisor explain ahead of time most of the changes that affect your work group (check one)

_____always _____most of the time _____sometimes _____never

46. What is the best source of information about things that affect you at the depot? (check one)

_____my boss _____depot newspaper

_____my union _____depot notices

_____my friends

47. Have you ever met your supervisor's boss (check one)

_____yes _____no _____don't know

48. Are you (check one)

_____male _____female

49. Are you (check one)

_____Black _____Caucasian

_____Hispanic _____Asian/Pacific Islander

_____American Indian

BY COMPLETING THE SURVEY, YOU HAVE ASSISTED US

IN LEARNING ABOUT HOW DEPOT EMPLOYEES

FEEL ABOUT THINGS THAT AFFECT THEM.

THANK YOU.

APPENDIX B

INTERVIEW INSTRUMENT

Interview Questions

1. How has contracting out affected the decision-making process?

2. How do you see CA program affecting accomplishment of the Shipyard mission?

3. In terms of your particular area, how does CA affect the accomplishment of your objectives?

4. How long was the time period when your people were under study?

5. How was their work affected during that period (was there an increase in grievances or absenteeism?)

6. Can you see a difference in the quality of performance (efficiency, productivity) of your people now that CA is taking place?

7. Is contracting out the best way to obtain efficiency in government services?

8. Do you think that, if the government has to reduce costs, that CA is an effective way to do it?

9. In what ways has contracting out changed the way you manage your human resources?

10. What can federal managers do to make their services competitive with the private sector?

11. Are you more conscious of controlling your grades (are you less likely to promote?)

12. What kinds of communication problems do you have with contractor employees?

APPENDIX C

MEANS AND STANDARD DEVIATIONS OF CRITICAL QUESTIONS

	Control	Moratorium	Studied	Combined
Since the contracting out program began at the depot, doing a good job has become:				
(1) more important (2) no change (3) less important (4) don't know				
MEAN	2.962	2.643	2.722	2.667
STD. DEV.	2.794	1.923	2.445	2.072
Contracting out of government services has caused my attitude toward the depot to:				
(1) improve (2) stay the same (3) decline				
MEAN	2.5	2.786	2.444	2.683
STD. DEV.	.542	.415	.705	.537
I can talk comfortably with my supervisor about work related problems:				
(1) yes (2) no				
MEAN	1.113	1.167	1.333	1.217
STD. DEV.	.320	.377	.485	.415
I get plenty of notice about changes that affect me:				
(1) always (2) most of the time (3) sometimes (4) never				
MEAN	2.736	2.857	2.389	2.717
STD. DEV.	.711	.814	.916	.865

My supervisor explains ahead of time most of the changes that affect my work group:

(1) always	(2) most of the time	(3) sometimes	(4) never
MEAN	2.415	2.690	2.333	2.583
STD. DEV.	.692	.715	.840	.766

My supervisor asks my opinion on work related matters:

(1) always	(2) most of the time	(3) sometimes	(4) never
MEAN	1.943	1.952	2.222	2.033
STD. DEV.	.602	.731	.548	.688

I don't mind changing jobs at the depot as long as the pay is the same:

(1) agree strongly	(2) agree	(3) neutral	(4) disagree	(5) disagree strongly
MEAN	2.940	3.846	2.667	3.519
STD. DEV.	1.634	1.479	1.799	1.645

I was treated fairly the last time I changed jobs at the depot:

(1) agree strongly	(2) agree	(3) neutral	(4) disagree	(5) disagree strongly	(6) haven't changed jobs
MEAN	3.059	4.780	3.938	4.544
STD. DEV.	2.204	2.080	2.016	2.079

I expect to continue working at the depot:

(1) agree strongly	(2) agree	(3) neutral	(4) disagree	(5) disagree strongly
MEAN	2.057	2.429	2.000	2.310
STD. DEV.	.177	1.291	1.549	1.366

I am an important part of this depot:

(1) agree strongly (2) agree (3) neutral (4) disagree

(5) disagree strongly

MEAN	2.731	2.571	2.000	2.407
STD. DEV.	1.497	1.564	1.620	1.588

My work is this important to this depot:

(1) very important (2) important (3) somewhat important

(4) of little importance (6) of no importance

MEAN	1.792	1.690	1.588	1.661
STD. DEV.	1.133	1.179	1.064	1.139

Job security as a reason to work here is:

(1) very important (2) important (3) somewhat important

(4) little importance (5) of no importance

MEAN	1.269	1.634	1.667	1.644
STD. DEV.	.598	.994	1.138	1.030

When my supervisor gives me a tough job, I:

(1) look forward to doing it (2) do the best I can

(3) would rather not do it (4) never had a tough job

MEAN	1.736	1.976	1.722	1.900
STD. DEV.	.560	.780	.752	.775

Job satisfaction as a reason to work here is:

(1) very important (2) important (3) somewhat important

(4) little importance

MEAN	1.981	2.195	1.706	2.052
STD. DEV.	1.146	1.436	1.213	1.382